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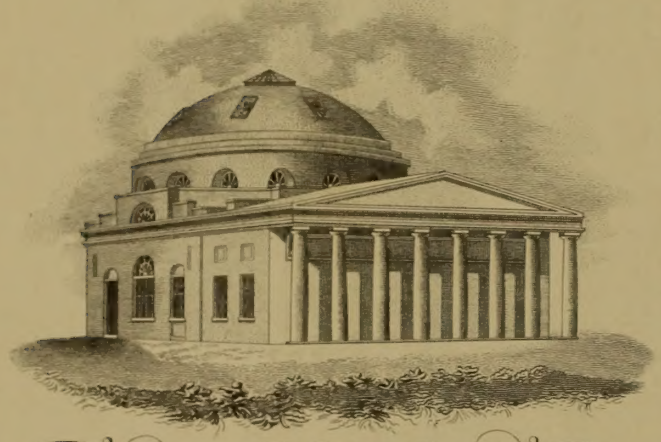

University of Maryland

# University of Maryland Theses

## Early Doctor of Medicine and Doctor of Physic Dissertations with Corrected Tables of Contents

The manuscripts described as either an Inaugural Dissertation or an Inaugural Thesis were presented to the University of Maryland for the Degree of Doctor of Medicine and/or Doctor of Physic during the years 1813-1837. The individual tables of contents were bound together during the 1940's. The original tables of contents for the bound volumes contained multiple errors in accuracy: missing, titles, and/or years. To address these errors, an additional "Corrected Table of Contents" has been inserted at the beginning of each volume.

The project team who investigated and corrected the tables of contents were: Richard J. Bleiler, Historical Library and Preservation Officer; Maria Magnolia Elahan, Metadata Management Librarian; Angela Cockrane and Carol Hudson-Henry, Resources Division; Sarah Hardy, Alex Schutz and Megan Wolfe, Services Division.

These dissertations were digitized in 2011-2012 and are available at the Libraries' Archive (archive.lib.umd.edu/dis) and the Internet Archive (www.archive.org).

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(CORRECTED TABLE OF CONTENTS)

UNIVERSITY OF MARYLAND

THESES

1880 (b)

| Author | Title |
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| Cowles, Josiah E. | Puerperal Septicemia |
| Smith, William M. | Typhoid Fever |
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HSHSL 2012 for the UM Digital Archive. Sources consulted for corrections: Original Dissertation; University of Maryland Medical Faculty, Matriculation List, 1851-1892; Cordell, Eugene F. "University of Maryland, 1807-1907" (New York : The Lewis Publishing Company, 1907), Volume 2.

| Author | Title |
| --- | --- |
| Grove, Frank W. | Cholera Infantum |
| Mendenhall, James N. | Typhoid Fever |
| McGee, T. J. | Heredity |

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UNIVERSITY OF MARYLAND

THESES

1880 (b)

| | | |
|---|---|---|
| Norris, M. McK. | Pneumonia (faded ink) | 55p. |
| Frederick<br>Mitchell, ~~F.~~ G. | Scarlatina | 27p. |
| Josiah<br>Cowles, ~~J.~~ E. | Puerperal Septicemia | 25p. |
| William<br>Smith, ~~Wm.~~ M. | Typhoid Fever (binding issues) | 35p. |
| Oliver<br>Jones, ~~O.~~ F. | Acute Parenchymatous Nephritis | 28p. |
| Pbostin, Swem | Differential Diagnosis of Heart Diseases (not in cordell) | 19p. |
| Augustus<br>Thomson, M. A. | Erysipelas | 20p. |
| Francis<br>Flannery, ~~F.~~ J. | Typhoid Fever | 29p. |
| Harvey<br>Cleaver, J. ~~H.~~ | Influences Which Modify the Action of Medicines | 26p. |
| Charles<br>Clark, ~~C.~~ H. | The Physician (faded ink) | 22p. |
| Patson<br>~~Batsan~~, A. F. | Sporadic Dysentery (yes) in cordell (probably faded ink) | 21p. |
| Alfred<br>Giles, ~~A.~~ B. | Pneumonia | 27p. |
| Hopper<br>Shepherd, J. ~~H.~~ | Clinical Reports of Six Surgical Operations | 31p. |
| Frontis<br>~~Froneis~~, D. B. | Anatomy and Physiology of the Pneumogastric Nerve | 23p. |
| Charles<br>Riley, ~~Chas.~~ H. | Caries of the Spine | 19p. |
| Allinder<br>~~Allinden,~~ D. K. | Pneumonia (faded ink) | 43p. |
| Frank<br>Grove, ~~F.~~ W. | Cholera Infantum (fade ink) | 19p. |
| James<br>Mendenhall, ~~J.~~ N. | Typhoid Fever | 20p. |
| McGee, T. J. | Heredity | 18p. |

Pneumonia

Class q 350

40

IMb
16983

Transcribe.

[illegible]

[illegible] lining [illegible]

[illegible] edge of the lung tissue is a rounded

[illegible] of the [illegible] which [illegible]

[illegible] vesicular [illegible]

[illegible]

[illegible] one, two or more [illegible]

[illegible]

[illegible] lobules are bounded, [illegible]

[illegible] of the bronchi, in the spaces between them,

[illegible] areolar [illegible] or a [illegible]

[illegible]

[illegible] possessing different anatomical

[illegible] which are the same as the [illegible]

[illegible]; that is, catarrhal [illegible]

[illegible]

[illegible] within the air passages, and

Cassian

[illegible]

[illegible] question. [illegible]

[illegible]

[illegible] blood, [illegible]

had made side entrances on

disease is occasioned, to sing

examination, [illegible]

[illegible] when [illegible]

[illegible] breathing. This sound is called [illegible]

[illegible] [illegible] [illegible]

[illegible] second. This can [illegible]

[illegible] very limited, yet in the begin-
[illegible]

[illegible] now having an immediate reference
to the work involved, & as stated, by
[illegible] what the design is, the work
[illegible]

[illegible] which gives the contract and,
[illegible]

[illegible] unrelated by its counterpart
[illegible]

expiration which is indicative of

[illegible]

[illegible] breathing, thereby obscuring some

[illegible] Expiration, & find, as the inflam-

[illegible]

[illegible] in proceeding from the first [illegible] it is, Ed how produced, is [illegible] most interest to the listener, as [illegible]

[illegible] Dyna but pass back to the [illegible] the [illegible] proceedings. He tells us that [illegible]

no sound at all, or there is

(bronchial respi-

ration.)

[illegible] in first [illegible] lecture o[illegible]

[illegible] of the [illegible] caught by [illegible] [illegible] [illegible] [illegible] [illegible] not through the [illegible] of the other.

This is what can be detected [illegible] [illegible] when the patient is requested to breathe deeply. And when he is able to [illegible] [illegible] [illegible] [illegible] in tones [illegible] as formerly. This one sound — [illegible] and corresponding to the tones on the other side of the chest. We have thus been made acquainted with two entirely different [illegible] sounds not heard in health.

When this [illegible] [illegible] [illegible] the [illegible] during respiration, is [illegible] the [illegible] [illegible] [illegible] [illegible] [illegible]. In this period the physician is unable [illegible] [illegible] [illegible] [illegible]

[illegible] it is passing into the third stage. [illegible]

[illegible]

[illegible] the boring stage. It is well worth remembering that he is not in the last stage. Inflammation may [illegible] cannot say whether the boring stage [illegible] the strength of inflammation in which it has passed into the third stage. But [illegible] the third stage [illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible] it may be little below the [illegible] or it may exist in almost any [illegible] Generally [illegible]

[illegible]

on the affected side. The disease
begins with the usual symptoms
of a Cold, Cough, and difficulty of
breathing, and pain in the chest, with
short, Hard Short Cough, Delirium is common,
Inspiration hard, expiration, on the 4th or 5th
day sometimes [illegible] the
in the temperature reaches to 104°, or
105°, in the evening, often [illegible]
hours after the first [illegible]
depth of fever [illegible] the 8th or 9th
day — As above stated, the patient is
found to have matter in the affected side.
The Blood has been found [illegible]
and [illegible], to a limited extent, in the
[illegible] lungs. The breathing is
affected in direct ratio as the [illegible]

[illegible]

Sometimes the degree of difficulty of breathing is [illegible] of the extent and degree of inflammation. The [illegible] respiration [illegible] would [illegible] from the [illegible] and the general system [illegible] The disease [illegible] When there is much difficulty of breathing, when the face becomes flushed, the features are [illegible], the shoulders are elevated and all the muscles which are auxiliary to the respiration are [illegible] into [illegible] action, the [illegible] fully [illegible] [illegible] we [illegible] we have [illegible]

the disease bronchitis. Delirium is
a symptom which frequently attends the
disease, and it may be considered an unfav-
orable one. [illegible]
[illegible]
[illegible]
[illegible] The [illegible] are
impaired to a certain degree.
The expectoration [illegible]
[illegible]
[illegible]
[illegible]
[illegible]
[illegible] to [illegible]
[illegible] has been allowed to accumulate.
[illegible]
[illegible]

[illegible]

[illegible] — after it has remained [illegible]

[illegible] few days, it loses its sanguineous

[illegible] stage [illegible]

[illegible] a [illegible]

[illegible] loss

[illegible]

[illegible] this latter change having

[illegible] it undergoes a deep reddish-brown

[illegible] and at the same time assuming a

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]. ——. In some cases, the

[illegible]

which is indicative of gangrene,

[illegible] to 100°F, or at most 120 to 120°F.

[illegible] 105°F [illegible]

[illegible] 200 beats per minute at [illegible]

[illegible] rapidity associated [illegible]

[illegible]

This [illegible] disease is in progress [illegible]

[illegible]

[illegible] the death. [illegible]

[illegible]

[illegible] a diarrhœal tendency it may [illegible]

[illegible] becomes acute, albumi-
nous, or albuminous, with a [illegible]

[illegible] the urine must be taken [illegible]
[illegible] hyaline and granular
casts [illegible] some epithelial casts
[illegible] the epithelial [illegible]
epithelial [illegible]
[illegible]

It is often dry, restless at night,

[illegible] breath, though the latter usually

[illegible] constitutions shattered, the intervals

[illegible] delirium

[illegible] lasting [illegible] hours.

The temperature of the patient rises

[illegible] hours. This may vary from

[illegible] to [illegible]

such as Typhus. Ex. Typhoid, fevers.

[illegible] an English Author [illegible]

[illegible] specific characteristics [illegible] in abeyance,

[illegible] observe

[illegible]

[illegible]

[illegible]

[illegible]

[illegible] morbid is a disease of Consider-

[illegible]

[illegible]

[illegible]

[illegible] stitutions have been treated by [illegible]
[illegible] disease.

Nevertheless,

there is, perhaps, no disease for which
opposite plans of treatment
[illegible]
[illegible] case. (Bretonneau)

[illegible]

[illegible] robust, healthy, subject [illegible] high [illegible] must be deprived [illegible] results. [illegible]

of the diseases should not be published
[illegible] times bloodletting was practiced,
[illegible]
[illegible] to induce them to resort to
[illegible] commencement "Kalendis Novembris
[illegible] Calendas mihi."
[illegible] was thus committed, in the
[illegible]
[illegible]
[illegible]
[illegible] Congratulation.
[illegible] they did not investigate the con-
[illegible]

[illegible] the last history of the disease in
[illegible] taken a great quantity of blood —
[illegible]

the alimentary canal [illegible], Dr. Todd
[illegible]
[illegible]
[illegible]
[illegible]
[illegible] form, and, that as Aconite, [illegible]
[illegible] Physician said that in the majority
of cases of pneumonia no medicinal agents
[illegible]
[illegible]
[illegible] Reform Physicians
[illegible]
[illegible]
[illegible]

[illegible] fever is high, wear flannel shirt to [illegible] weather is not hot, [illegible] patient [illegible]

[illegible]

[illegible] applied [illegible]

[illegible] the Clothing [illegible] applies to the third or [illegible] stage of collapse, Subsiders from the first may [illegible]

[illegible] form at the commencement

[illegible] of [illegible] [illegible] as it

[illegible] as a cardiac sedative diminishing

[illegible]

[illegible] lessening the inflammation. Dur[illegible]

[illegible]

[illegible]

[illegible] then Quinine with the

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible] — [illegible] The [illegible] of this disease in children involves the same principles as the [illegible] of the disease in adults [illegible]

[illegible]

[illegible] I can affirm that he has [illegible]

[illegible]

[illegible] boasts that it can be treated

[illegible] by mineral, ——

[illegible]

Silicate Iron

[illegible] Co.

[illegible]

Entered

[illegible]

[illegible]

[illegible]

75

X

X

A

Thesis

On

Sciatica

By

Frederick G. Mitchell
Maryland.

# Scarlatina.

Among [illegible] diseases which [illegible] [illegible] [illegible] a [illegible] [illegible] [illegible] Scarlatina, whether we consider [illegible] [illegible] [illegible] in which it [illegible] [illegible] [illegible] character of its complications and sequelae.—

[illegible] to the Physician the [illegible] additional anxieties, [illegible] [illegible] but the innumerable difficulties attendant on a [illegible] [illegible] consider the [illegible] [illegible] [illegible] a

[illegible]

Ancient authorities declare that a man incurable and labouring under an envenomed affection, may procure his death by the sentence, and in the main accompanied with the consent of [illegible] sound and [illegible] people, and it may occur without an Eruption on the skin, the cause of the disease being in some instances and by his accusation.

Another marked peculiarity is the variable [illegible] the disease, which is [illegible]

[illegible] as to [illegible] but [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] to baffle all remedial agents.

In [illegible] his discourse on an [illegible] [illegible] [illegible] difficulties attending its history, since its origin is involved in much obscurity, [illegible] it is said to [illegible] [illegible] in the writings of Hellenistic [illegible] [illegible] Greek or Roman [illegible]. An Egyptian, Sanchoniathon, was the author of a work which [illegible] in Rome, and the [illegible] the 1st Century. This work [illegible] [illegible] [illegible] [illegible] [illegible]

[illegible] a [illegible] quarantine [illegible]
[illegible] in the [illegible] [illegible] that
scarlatina, [illegible] [illegible]
[illegible] diseases.—

Dr Pettenkofer
[illegible] first to accurately
describe the [illegible] of [illegible]
diseases, various treatises and
essays have since been published.
In giving a description of scarlatina, I shall endeavour to present the characters all dwelt upon a typical case—at the same time noticing the various types of different epidemics, the causes as far as [illegible], the diagnosis, prognosis, and treatment

[illegible] and [illegible],

Dracaena is divided by [illegible] into [illegible] — display, [illegible], and [illegible], the first of which a [illegible] period of circulation, is ushered in with [illegible] [illegible] [illegible] [illegible], [illegible], and heat of skin, the [illegible] being by no means [illegible] [illegible], or [illegible] [illegible] [illegible] as to attract [illegible] [illegible] notice, then is associated also [illegible], suffused face, [illegible] [illegible] [illegible] [illegible] accompanied by [illegible], on the 2nd day of the fever the rash commences [illegible]

its appearance although it may be delayed till the 3rd or 4th day, a circumstance usually ascribed to some peculiarity in the constitution of the patient or disease,—the eruption commences its appearance on the neck, face, and chest, and afterwards diffuses itself over the body, so that on the 3rd day of the eruption the entire surface is covered, the skin being for a time very hot and dry.

"On the 5th or 6th day the eruption is at its height, which in the body it forms the appearance of inguinal patches, the redness being more [illegible]

[illegible] the [illegible]
[illegible] — [illegible] is the [illegible] [illegible]
[illegible] the [illegible] — [illegible] we find the
mucous membrane of the larynx,
fauces, pharynx, nostrils, also
involved — while the papillae
of the larynx, [illegible] also are
developed, [illegible] through the
white coat, which is usually [illegible]
the first few days — a very [illegible] as
[illegible] feature is this loss, that [illegible]
as frequently to change the
disease in the absence of other
fixed characters — especially in
the removal of the coat leaves the
larynx reddish clean, red, and
ulcerated like an [illegible].

The eruption itself is not a uniform blush as in Erysipelas, but is formed by an infinite series of small red elevations of the skin, analogous to the vesicles of Eczema, forming clusters on a very large scale; giving to the touch a sensation of roughness when the hand is passed over it. In ordinary cases the Eruption may be recognised at its height on the 4th day, on the 5th it begins to decline, and continues to disappear gradually until the 8th day. Such is the course of the disease in a mild Epidemic, but cases occur in which the symptoms are much more severe

[illegible] headache, [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] permanent heat of skin, [illegible] acceleration of the pulse; [illegible] delirium and derangement of the nervous system, with the addition of complication of [illegible] and [illegible] soreness of the throat constituting the 2nd variety or scarlatina anginosa —

The stress of the disease seems to have fallen upon the throat, there is stiffness of the neck, and, about, the angles of the jaws, roundness and soreness of throat, difficult deglutition, hoarseness, [illegible] of the throat on [illegible] the palate,

Irritated and swollen, and pro-
duce the usual irritations —
while the lacunous mucous secretion
coupled with the effects attendant
upon its expulsion add to the
discomfort of the sufferer.

As this condition develops
there is a corresponding increase
in size, with erosion of surfaces
between the tonsils, and finally a
cicatrization of the surface, the
latter being a marked characteristic
of the disease. It is said in the
chronic forms of this variety, the
Epithelium is somewhat more
intensive in appearance — Ulceration
in exceptional instances is antecedent

its crossing by 12 long-roads. In circumstances it is said to show a grate disposition to recede, and, if practicable, thus entering its course, and detaining drainage water, the latter process is equal by extension the skin of the hands being thrown off like a glove.

In this case, there is great swelling of the and C. cat glands, with extensive disease to the cellular membrane, accompanied with acid discharges, while the eat also increased involved.

In this case there is said to be a great obstruction in the alimental canal, and by far more extensive

cavities, and Empyema.

The 3rd division, or Scarlatina Anginosa includes the most severe cases of all the types, and is correspondingly dreaded, in view of the fact that in some of its phases it is rebellious to treatment, to this fear there is superadded because of the often accompanying complications and consecutive diseases, marked frequently by violent delirium, or that of a more smoldering order, and albuminuria evidencing a peripheral injection of the nervous system, while the pulse is small and more frequent, the rash also presents some variations, sometimes passing away a few hours after its appearance,

shrinking itself against some adjacent object, the color being changed from a bright rose hue, to a dark livid red, or mottled, or in the worst forms being interspersed with petechiae, the temperature of the skin cool, and countenance expressive of anxiety, the tongue dark brown and furred, while the breath is fetid in the extreme.

In other instances the patient falls into low muttering delirium, which passes quietly into coma, the face of the patient assuming the unmistakable "hippocratic" at once, in these cases no eruption appears, the patient quietly sinking from exhaustion.

descending of the throat, which is
called by some author, much to the
character of the disease, not only from
the mechanical obstacle to breathing and
introduction of proper nutriment
in the stomach, but also through add-
itional blood poisoning arising
from absorption of vitiated secretions
which the patient vainly endeavors
to expect.

In the above description I have
only sought to give the leading comp-
ositions marking the stages, these
being modified by the governing
idiosyncrasy and presenting many shades
of difference, as may be conceived.
Rousseau, Flint, and other authorities

that it is known to be infectious, and cases are to instances cited in proof of its transmission to remote and healthy districts from an infected locality. Nurses and attendants upon the sick, have been carrying the miasm in clothing or other articles. — It is fair to assume that bad hygienic conditions in certain localities, may so impress the prevailing type, as to give rise to cases of a very grave character, sometimes, a mild Epidemic is prevailing.

In ordinary cases, the Diagnosis is not attended with much difficulty, the remittent fever —

ease — the facility with which it is
to infection, the character and appear-
ance of the Eruption on the 3rd day,
the great increase of temperature, sore
ness of throat, fauces, and characte-
istic appearance of the tongue, will enable
us to exclude Measles, Varicella, and
Roseola, which frequently occasion at
times perplexity. With absence of
the peculiar features, the diagnosis
becomes more difficult in the early
stages, indeed in the exceptionally
malignant type, in which we find
the patient in a low typhoid con-
dition, where the poison seems to have
overwhelmed the nervous system,
with no appearance of Eruption or

of Eruptive Symptoms, I should think a diagnosis extremely difficult — our chief reliance under these circumstances would be based on the probability of exposure, coupled with the suddenness of the attack and its extreme gravity —

The Prognosis is usually good in mild Epidemics, which we are taught not to forget that the type of the Epidemic may suddenly change — that at any grave case may suddenly occur — but usually this, but complications, may arise, which when taken in connection with the well known quality sometimes following in the wake of

even the ideal form of all normal, makes us cautious in foretelling the issue.

In the Angina variety, the prognosis will be influenced by the condition of the throat, the amount of Catarrhal disturbance, the character of the fever, and the occurrence of complications, and must necessarily be more guarded, as it draws on consequently increased.

In the malignant types especially when, a condition analagous to the Septicæmic appearances, the prognosis is decidedly bad but for recovery under these circumstances I have thus endeavoured to give the

general outline of Scarlatina.
I cannot discuss the subject of fever by describing more minutely morbid appearances, and the application of "Claud Bernard's" experiments on the cranial sympathetic nerve, in explanation of the great elevation of temperature.
I cannot give the conflicting views, as regards the prophylaxis of Belladonna, - surely statistics showing the greater frequency in children, and diminished susceptibility as age advances, point out also the general immunity secured by a single attack, while at the same time we notice

the operation of the forceps, due to the prevalence of an epidemic in the production of sore throat, scarlatina & Febricula were in these frequently, which have previously suffered.

To analyze the subject further varied related the art to beyond the limit assigned for it. Hence I will pass on to a description of the more frequent complications, and sequelae, and conclude with the treatment, for after all this becomes the most interesting question to a "Minister of the healing art" & very appropriate in the language of an old practitioner —

1st "What is the disease?" 2nd "What is good for it?" Among the most important complications may be mentioned Convulsions, renal diseases, and Uraemia, haematuria, and inflammation of either the viscera or the serous coverings - sometimes Rheumatism, and extensive enlargement and inflammation of the cervical glands. Scarlatinous Bubos as named. The most serious complication is Uraemia, the presence of which would be suspected by the occurrence of convulsions, delirium, and coma, with embarrassed respiration occurring without disease of lung or bronchia, Cephalalgia with —

including a diminished secretion of urine with low specific gravity.
As regards sequelae, the most conspicuous and serious is anasarca, with Albuminuria, not only as regards immediate effects, but it may eventually cause the function of internal organs by accumulation of fluid within the serous cavities, but also in view of its dependence on renal lesion, which although not frequently latent, may yet lay the foundation of future chronic trouble, and termination in Bright's Kidney disease.

Treatment of mild forms of Scarlatina, resolves itself into treat-

watching its progress, and abstaining from active medication, or a suitable measure may be resorted — well ventilated apartment — the exhibition of carbonic acid, or the gentle saline diaphoretics, keeping bowels in a relaxed condition and rigid antiphlogistic diet —

In the more active grades, in addition to these measures, or either, sponge the body with cold water to reduce the high temperature, or resort to cold affusion, or what is more preferable the "wet pack", wrapping the patient in a wet sheet and covering with blankets, repeating these measures as required. —

If the skin is severely affected, the exhibition of Potassa Chlorat. gr. ss. with ice given, additional, we also use gargles of some disinfectants, in the event of ill conditioned appearance of throat, such as Chlorate of Potash solution, with the addition of carbolic acid and Glycerine, or solution of Chlorinated Soda, or Permanganate Potassa &c. If delirium occurred while temperature was high, iced applications to shaved head, which if prostration occurs, with typhoid symptoms — quinine, Carb. Ammonia, and Alcoholic stimulants must be substituted, and Ammonia brandy given, if convulsions or other

Corrosive sublimate should never be
prescribed, I would make careful
inquiry as to the renal function,
and if the existence of Albumen
were proven, seek to ward it off by
exciting free action of the skin, and
absolute non-irritation or rest
of the kidneys, while it persists and
pronounced. I would give Elaterium
with the hope of Elimination through
the bowels. These means with the exci
tation of the Bromides, Aqua Camphora
or preparations of Belladonna. Hy
oscyamus, to allay morbid wakef
ness - Effervescing draughts, to allay
nausea, embrace the chief indica
tions of treatment, while the —

Complications should be treated as they arise according to the established rules, not forgetting the fact, that we must avoid such active treatment as might conflict with the proper course of the disease, for as "Trousseau" observes it has a determinate course to run, which should not be marred by unnecessary interference — during convalescence an important point consists in the avoidance of Exercise until desquamation is completed — during and for a time this period a very important item of treatment consists in anointing the surface with lard or oil — it allays the irritation,

and I have heard it said that patients so treated, were not so liable, to subsequent anasarca, In the malignant typhus, the indications, are, to support, the powers of life, when yielding by keeping up external warmth, and the administration of stimulants, quinine, and concentrated broths, giving such, alterives, to the bowels, as is required, Among the sequelae, the most frequent is, albuminuria with dropsy, which is, to be treated by such purgatives as excite serous discharge, Elaterium, Bi sal Potasa, and in later period, when we have no ran

to suppose, that the kidneys are engaged
almost to ordinary diuretics, aided
with such measures, as circle Calomel
relieve, free angle hot air bath or vapor -
Otitis, degenerating into a chronic character,
with purulent discharge, together with
enlargement of the submaxillary, and parotid
glands, frequently follow in the wake of
inflammation of the serous coverings,
as pericarditis, pleuritis &c, are not
unfrequently seen - each of these de-
mand, an appropriate treatment,
suited to each case, but of course
modified to meet the peculiar
debilitated condition.

Frederick G. Mitchell,

# A Thesis
on
# Puerperal Septicaemia.

Respectfully Submitted
to the
Faculty and Provost
of the
University of Maryland Medical School.
by
J. E. Cowles.
of
North Carolina.

Session of 1879-80.

From a review of the most modern literature upon the subject, I would thus define this disorder:- An acute febrile disease, occurring from one to eight days after childbirth, usually on the second or third day, nonspecific in origin, due to absorption of septic matter, generally from some part of the generative tract & characterized in its malignant form by a tendency to a rapidly fatal termination. In the light of recent investigations, it would seem that a majority of Obstetricians have accepted the theory of the nonspecific nature of this disease & its similarity to surgical septicaemia, giving preference to the name Puerperal Septicaemia, over that of Puerperal Fever, formerly used, which they urge, with reason, would imply a specific

character, similar to that of Zymotic diseases. There are, however, not a few, who believe that it is an "essential zymotic fever, peculiar to, & attacking only puerperal women & which is, as specific in its nature, as Typhus or Typhoid & to which the local phenomena, after death, bear the same relation that pustules on the skin do to Small Pox or the ulcers in the intestinal glands to Typhoid Fever." The most prominent exponent of this view, on this side of the Atlantic, is Prof. Fordyce Barker, who disposes of the self-generated variety of the disease, by calling it Simple Septicaemia. The disease may arise in 2 ways: First, as just hinted, by autogenesis, that is to say, where the poison is produced

within the patient, from decomposing placent-al fragments, clots, foetal remains &c, in which case, absorption wd be likely to take place, from the placental site of Uterus or a laceration of the cervix: Secondly by Heterogenesis, where the septic matter is in-troduced from without, being conveyed usual-ly by direct contact from medical attend-ant or nurse, more rarely from bedclothes or other material & sometimes, doubtless, from the air itself, absorption taking place at any solution of continuity along the vulvovaginal tract or possibly from the unbroken vaginal mucous membrane, as in certain cases occurring before delivery takes place. As in a healthy individual up-on the introduction, into the system, of any

foreign substance, the violence of the symptoms will vary according to the character of the poison introduced, so in the puerperal state, that obtained from the cadaver, being of the most virulent type. This was specially noted in the Vienna Lying-in-Hospital, where in the division attended by medical men & students, who frequented the dissecting rooms the mortality amounted to one in ten cases, while in the division attended only by women, it never exceeded one in 34 cases, immediately falling to the latter figures, in the former division, upon instituting the proper use of antiseptics & other precautions. Numerous instances are on record where physicians have carried the poison from the post-mortem table to their next confinement

cases, which many times eventuated in death from Septicaemia, hence the necessity of the greatest precautions & the free use of antiseptics after such exposures, before taking charge of a labour case. Another class of poisons, causing all the symptoms of the so called Puerperal Fever, is found in Zymotic diseases, notably Erysipelas, Scarlatina, Variola &c. In such cases, whether the specific poison sets up a metritis, then absorption of inflammatory products & so on to cause a simple case of Puerperal Septicaemia, as would any non-~~peculiar~~ septic matter, or whether on the other hand, the specific disease is so modified on account of the puerperal condition, as not to give rise to its characteristic symptoms & to be indistinguishable from a simple Septicaem-

-ic attack, being nevertheless the special Zy-
-motic disease slightly modified but capable of
reproduction with its characteristic symptoms, in
a nonpuerperal subject, does not appear to
have been conclusively determined. Dr B.
Hicks reports seventeen cases with all the
symptoms of Puerperal Fever, clearly traceable
to the contagion of Scarlet Fever, which
Playfair is inclined to cite as modifications
of the latter, mentioning also a case in
his own practice, in which a lady, a
few days after delivery, had a serious at-
-tack of Septicaemia, without Diphtheritic symp-
-toms, her husband, at the same time, being at
-tacked with Diphtheria of a most marked
type. Here the two attacks were probably
dependent upon the same Materies Morbi.

Again, the poison of Erysipelas has been known repeatedly to cause Puerperal Septicæ-
-mia, the woman dying of it & her babe of Erysipelas. If we deny the identity of these two diseases, it would seem that the Septi-
-caemia, in this instance, was but a modi-
-fication of the Erysipelas, still possessing the power of reproducing itself with its characteristic symptoms. Playfair suggests that if the zymotic poison be absorbed through the ordinary channels, it may pro-
-duce its special symptoms & run its usual course as has often been observed in puerperal wo-
-men. While if absorbed through any abra-
-sion in the generative tract, it may act more directly as a septic poison, or with such intensity that its characteristic symptoms

are not developed. That still leaves the main point an open question, & until we have positive proof, that Puerperal Septi-
-caemia, traceable to Scarlatinal or other Zymotic poison, as cause & effect, is incap-
-able of reproducing that Specific disease from which it was derived, we should cer-
-tainly not neglect proper precautions and preventive means. As to the nature of the Septic poison we know nothing of certain-
-ly. By Microscopical examinations pathol-
-ogists have found bacteria in the veins, lymphatics & various organs of many wo-
-men dying of this disorder: But whether they are the poison or merely carriers of it or yet have nothing to do with it, is a problem still unknown.

Probably the most common channel of absorption is through the lymphatic System, as seems proven by the occasional arrest of the poison by the glands & its prevention from getting into the general circulation, as in Phlegmasia Dolens &c.

The post mortem appearances are very variable. In the most intense & rapid form of the disease, no appreciable local changes may be observed; though it is evident, that in such a vital derangement of the whole System, serious morbid changes must have taken place. In cases of the most malignant type, Dr Copeland observed at post mortem examinations, a peculiar faint odor, a very dark hue & a want of proper coagulability of the blood, the clot forming a large, loose,

gelatinous mass, with the coloring matter at the bottom of the vessel, in the form of a dark brown precipitate like coffee-grounds. He also remarked that when leeches which had been applied to the abdomen, were removed, it was with great difficulty & sometimes almost an impossibility, to stop the bleeding. He observed too, that ecchymoses were found in various organs, specially the lungs, kidneys & spleen. More recently the microscope has revealed in these cases cell disintegration & granular infiltration, showing the commencement of inflammation in most of the tissues. In ordinary cases lesions are conspicuous and numerous. There will often be found ulcerations and sometimes gangrene about

any abrasion of the generative tract. Inflam-
-mation of serous membranes, of the lung, eye or
any tissue of the body may occur. Therefore
this disease is liable to many complications,
the most frequent of which is Peritonitis. To
such an extent is this present, that with
some practitioners, Puerperal Fever & Puerperal
Peritonitis are almost convertible terms.
Among other complications may be mentioned
Pleuritis, Pericarditis, Pneumonia, Phlebitis, Lym-
-phangitis &c. modifying the symptoms as they
are one or severally present.—
Symptoms: The disease is generally ushered in
with a rigor, the violence of which is not
at all in proportion to the intensity of the
disease. There is a feeling of great depres-
-ion, accompanied with headache & uneasi-

-ness at the praecordial region. The pulse is rapid, being from 120 to 150 beats per minute, & compressible, and the temperature high, ranging from 102 to 105°F. The intelligence, as a rule, is unaffected, although there may be low muttering delirium in the worst cases. The countenance is sallow & haggard, wearing an anxious expression, as of impending calamity. The skin is usually hot & dry, becoming, as the case approaches a fatal termination, cold, damp & clammy, the tongue at the same time changing from its moist coated condition, to a dry & dark state. Diarrhoea and vomiting are not infrequent, the former being sometimes profuse and uncontrollable & the vomited matter being of a dark coffee-grounds color. The lochia are

generally suppressed or if present are highly offensive or purulent where there is marked metritis. The breathing is hurried & panting & the breath itself has a peculiar, sweetish odor, very characteristic of Septicaemia and often likened to the smell of new mown hay. At the onset of the attack there is usually a vague sense of pain in the hypogastrium, which, if Peritonitis supervene, is rapidly increased to positive agony, the patient lying with her limbs drawn up & screaming at the slightest touch of the bedclothes. This condition should not be mistaken, as its treatment differs very much from that of Acute Tympanites or False Peritonitis, which closely resembles & is apt to be confounded with it. As before stated these symptoms may be

modified & combined with others on account of the local complications giving rise to their own special symptoms & signs, thus Pneumonia would add dyspnoea, cough, rusty-colored sputa, dullness on percussion over lungs & increased vocal fremitus, Pericarditis & Pleuritis would each be marked by its characteristic friction murmur and other peculiarities, Nephritis by scanty urine containing albumen, casts & disintegrated blood, thus multiplying symptoms as complications arise. — Treatment. — In this as in all other fatal maladies, prophylaxis is of the first importance. As blood deterioration predisposes to this disease, marked hydraemia, in the latter months of pregnancy, should be counteracted by the free use of Iron, combined if necessary with tonics.

A generous diet should also be ordered & excess of fibrin reduced by the use of veg-
-etables & their acids, with a proper amount of exercise. Mental depression, a well known predisposing cause, should be overcome by change of scene, cheerful company or other available means. An offensive uterine dis-
-charge is to be corrected by injections of a weak solution of Permanganate of Potassium or Carbolic acid. Above all things the most scrupulous care of avoiding all risk of infec-
-tion, should be observed by the accoucheur. He should therefore omit being present at all autopsies &c. specially where the subject has died of any contagious disease and con-
-tact with cadaveric poison from any source should be followed by thorough ablutions

with antiseptic solutions. It is stated upon good authority, that no one who has attended a case of child-bed Fever, should perform the functions of an accou-cheur, until a month has elapsed and not even then, until after thorough clean-sing & disinfection. After diagnosing Puerper-al Septicaemia, the first indication for treat-ment is to discover, if possible, the source of the poison, whether it be auto- or Hetero-genetic. In either case intrauterine injec-tions, when properly given are likely to be followed by none, but the best results. Specially is this so in the Self-generated variety of the disease. Indeed this means is so highly esteemed at present, that at the late meeting of the American Gynaecolog-

-ical association in this city, its President Prof T. G. Thomas, than whom I could cite no higher authority, stated, that he consider-
-ed intrauterine injections our great sheet-anchor in the treatment of Puerperal Septicae-mia. Quite a number of the most prominent members of that learned & practical body of men spoke in like terms of the method, in fact all who had anything to say on the subject, with a single exception. I refer to Prof. Barker, who accorded to the means only his partial support. He stated, never-
-theless, that he thought intrauterine injec-
-tions very valuable, in a limited number of cases & that by this means alone, he had several times markedly & permanently reduc-
-ed temperature. In one case he cited, the

temperature was rapidly lowered from 105 to 103°F, pulse from 160 to to 120 & respirations from 44 to 20. Prof. Thomas also cited a case, in which they brought down the temperature from 107 to 103°F. He thinks more benefit is to be derived from their early use, before the poison is transferred from the Uterine cavity to the lymphatics. At this same meeting Dr J. R. Chadwick of Boston reported five cases of Autogenetic Septicaemia, all of them recovering by the use of intrauterine injections of a Solution of Potassium Permanganate, no definite Strength being required. A few crystals are dropped into warm water until it acquires a deep purple color & the Solution is ready for use. Dr Chadwick prefers this Solution to all others, for two reasons, besides being

equally efficient with any known disinfectant, it gives valuable evidence, by a change of color to a dirty yellow, so long as there remains any putrid matter to be rendered inert. It is also astringent & may thus prevent the tissues for a time from further absorption of septic matter. Dr E. W. Jenks of Chicago in a recent paper on this subject states that intrauterine injections should invariably be used, if there exist any of the following conditions: (a) If there is a premature cessation of the lochia with any constitutional disturbance: (b) If there exist a purulent or fetid uterine discharge: (c) And when there are good reasons for believing the uterus contains fragments of placenta or clots & is imperfectly contracted.

He also states that they should be more gen-
-erally used, than heretofore, in the prevent-
-ion & treatment of puerperal diseases,
because: (a) They are devoid of danger
and capable of great good, if properly
used: (b) There are no other remedial
agents which act so speedily in lowering
the temperature of Puerperal Septicaem
-ia: (c) They are peculiarly serviceable
in causing the expulsion of clots or frag-
-ments of placenta & aid in subinvolution:
(d) They have averted a number of deaths
from septic poison. As the only danger
from their use is the getting of air in
the uterine sinuses, this may be reduced
to a minimum, if not entirely avoided,
by Dr Chadwicks method of injecting,

which he advises to be done in the following manner: The antiseptic solution is carefully injected into the vagina, with the patient lying upon her side, until the fluid begins to ooze from the vulva, she is then gradually turned upon her face, in a slight knee-elbow position and the injection continued as long as necessary. By this plan it is evident, that the uterus gravitating into the abdominal cavity, allows the fluid to flow through the patulous os into its own cavity, by simple atmospheric pressure, any air forced into the vagina remaining there floating on the surface of the liquid. I have dwelt thus at length upon this mode of treatment, because I think it of great

importance & not sufficiently practised. Temperature may also be reduced by large doses of Quinine, gr x-ʒj, three or four times daily, well combined with Hydrobromic acid to prevent annoying head symptoms. Salicylic acid may be substituted as cheaper & little less effective than Quinine, although larger doses are required to get the same effect. To gain time & have certainty of action, the Quinine may be given hypodermically by injecting ♏xx or gr iv of a solution of the Hydrobromate. Used thus it is reputed to be equal in effect to three or four times as much given by mouth. If a nearly neutral solution be used & the injection be given "deeply", no fear of resulting abscess need be had. When great prostration, marked

by a small, irregular pulse, profuse sweats & cold extremities, is not present. For Aconite root gtt j in ℥j Spts of Mindererus may be given every half hour carefully noting result and increasing interval of administration, according to effect produced. Ice applied to head & sponging body with cold water & vinegar, are very useful antipyretic and comforting measures. Pain from Peritonitis should be relieved promptly by the bold & free use of Opium, which, as advised by Leishman, should be continued in small doses, for some time after disappearance of severe symptoms. A dozen leeches may also be applied over the hypogastric region. Turpentine stupes to the abdomen and turpentine internally in xv–xx gtt doses, specially when there is tympanites is

said to be useful treatment. Constipation may be relieved by a mild aperient, as ℞ of Gregory's powder, consisting of Calomel, Magnesia, Rhubarb & Ginger. Exhaustive diarrhoea should be check-ed by appropriate remedies and local complica-tions treated, as they are recognized. Antifer-ments, as the Sulphites, Carbolates &c, have been suggested, to counteract the Septic state of the blood & such may in time be found use-ful, as the nature & modus operandi of the Septic poison, becomes better understood. ℞ of Chloride of Iron, by analogy, would also seem indicated. But the chief indication for treatment is to support the vital powers of the patient, hence Stimulants & concentra-ted nourishment should be given from the outset of the attack. Dr Sinclair, of Boston

recommends that Oiss of the best French Bran-
-dy and Oiij of milk be given during the twenty-
-four hours, the one in ℥j. the other in ℥ij doses
every hour. Of course, this amount would only
be needed in very adynamic cases of the dis-
-ease. If the stomach reject food, resort
must be had to nutrient enemata, stimulants
being also given per rectum or hypodermical
-ly.

A Dissertation
on
Acute Parenchymatous Nephritis
by
R. F. Jones of Pa.
Submitted to the Regents and Faculty
of
The University of Md.
For
The Degree of M. D.
Feb. 14. 1880.

# Inflammatory Affections of the Kidney.

In treating of a disease which attacks such an organ as the kidney, it might be well to consider briefly, first, the structure of the organ, and as many of the other viscera that each has its own peculiar structure, any part of which may be the primary seat of disease affecting the organ and the part affected giving name to that disease, as with the kidneys.

The kidneys are glandular organs the chief parts entering into the formation of them being, besides the blood-vessels, efferent and afferent, the uriniferous tubules or the

[illegible]

The term Bright's Disease has been used in a general way to include all affections of the kidney of an inflammatory character, and made known by certain signs and symptoms, the principal of which have been albuminous or albumenoid and bloody urine, dropsy, the days of Dr Bright, who made the first systematic investigations in the obscurities relative of pathology in the early part of the second quarter of the nineteenth century.

Since the time of Bright however many, [illegible] are been made in this direction throwing much light upon the subject, so that at the present day, the knowledge of this class of diseases is beginning to assume somewhat more just proportions.

Authors of the present day make various classifications of diseases of the kidney, but the one which is probably the most intelligible is that which is based on the different structures of the organ.

Under this classification, we have atrophy, which may be caused by the tissue the cells which form the

the parenchymata of the nucleus of the
poison.

## Pathology.—

The pathology of the formal of the
disease is somewhat obscure.
The secreting cells of the kidneys are
required as the primary seat of the
fourth morbid manifestations, these
depending on an effort made by the
cells to eliminate from the blood
some elements product.
Accepting this view we are obliged
to submit to the statement that
the disease is always due to some
irritant product in the blood:
which we doubt is hardly as clear
to explain away the cause of our

attacks of palpitation are so marked as to simulate the attacks of angina pectoris by the paralysis of a cardiac branch or dilatation of arteries, with dilatation of the ventricle, etc.

Hence we find that it is sometimes the effect of irritation of the nervous system, and is therefore sympathetic in origin, or in other words not always due to a morbid element in the blood.

The microscopical appearances of a heart attacked with this disease will vary with the character of the inflammation, which may be either acute, chronic or degenerative.

The lungs have an uniform size, or more that larger than normal, and are not collapsed. The appearance is commonly uniform throughout, the surface smooth and presents a healthy appearance. They may appear congested throughout, or may be irregularly congested, marked with spots of a unnatural color.

On section, the cortical part is usually found to be relatively increased in volume and the cut surface is found to be covered with dark red spots which correspond to the situation of the malpighian bodies. The medullary portion will be darker than usual and may be seen

a striated appearance of alternating dark and light lines, the light being a transformation of the changed uniformed tubules.

If the uniformed tubules be examined more closely they may be found to present different appearances. Firstly they may appear in the first stage of a simple tubular inflammation, when the epithelial lining may become hardly or entirely differ from its normal scintillating, translucent and the tubules have more or less filled with cells which are not the non-cell contents.

Secondly in spitting in a tubular inflammation affecting the

[illegible]

In another class of cases there may be found in the centre of the tubes a hyaline or coagulated material which by some (Virchow) is said to be a cryptococcus exudate.

Again in another class of cases all the inflammatory changes commence in the epithelium cells of the uriniferous tubules, and they become distended and cloudy, then nuclei disappear, desquamation begins, the tubes become filled with broken down epithelium or fatty matter. This process has been called Chronic desquamative nephritis by some but is said by Ziegler and others to be a misnomer

intercranial respiration.

These are Dr. Brown's homeodynamic objections to the theory; first the respiration with cells hypertrophied, and degenerations would take place of the cellule with their products,

second the venous congestion produced by the cerebellum would allow the cerebellum to suck into the tube, but being with the cerebellum,

and third the intermittent circulation may cause an effusion of fluid in angular in the tube and with this the cerebellum exists.

Conclusion –

Among the many cases of the vascular are the following;

exposure to sudden changes of tem-
perature, continued exposure to the
atmosphere, become addicted to the
use of alcohol are very liable to
the disease not alone from the
direct effect of the alcohol but
also from the exposure to which they
subject themselves while under the
influence which is but the legitimate
result of such indulgence.
We are unable to lose sight of the
primary effect of alcohol in this di-
rection, as it may also be a predis-
posing cause of the disease.
When taken into the system in
larger quantities than can be ta-
ken up by the circulation or than

[illegible] affected by the region
in which it is determined by the ex-
citing, other primary causes are [illegible]
[illegible] of [illegible] and also [illegible]
[illegible] the [illegible] of
[illegible]-
ration. Other irritants or poisons,
[illegible] of impressions, [illegible] re-
[illegible] and
[illegible] other internal or inter-
[illegible] substances are frequently
or [illegible] from the cause of the disease,
[illegible] and [illegible] the
[illegible] cause of the disease is the
[illegible] of specific poisons in the
blood, such as are peculiar to
[illegible] epidemic as scarlet-
[illegible] fever, diphtheritic, [illegible] and
[illegible] [illegible], [illegible] or

other known cause of this disease.
It was formerly supposed the cause [illegible] the [illegible] of the renal circu-
lation by pressure upon the renal
veins but a better explanation is per-
haps this:- that there is an abnormal
amount of excrementitious matters in the
circulation causing an increased
action of the [illegible] organs that [illegible]
are [illegible]
[illegible], [illegible] [illegible] [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible] [illegible]
[illegible] of the surface of the body
[illegible] [illegible],
It has been claimed that compres-
sion of the [illegible] [illegible] [illegible]
by chilling the surface [illegible] [illegible]

exhaustion the same as the might in case of consumption.

Again it has been given as a cause, that the deficient action of the skin caused by the effusion of the lungs, or night the eliminating power is diseased and allows certain excrementitious matter to accumulate in the blood, the elimination of which is otherwise effected by the lungs and causes increase of nervous and also irritates the bowels.

Another theory is that it is due to a peculiar action of the pneumogastric system and their being intimately connected.

The disease occurs oftener in males than in females, which is probable

due to the greater amount of effusion in which the parts are subjected in their various occupations.

It may occur at any period of life, it occurs most frequently in childhood, owing to the pressure to follow upon the acute exanthemata,

## Symptoms.

The symptom which usually first attracts the attention of the patient is oedema of the legs. There are sometimes some gastric symptoms or disturbances noticed preceding the oedema, but they are not generally distinctive. The gastric disturbance is thought by some to be

through blood by the effect of the poison to eliminate the abnormal amount of urea.

There may be some elevation of the respiratory constituents [illegible] being in the blood rapidly.

It sometimes happens that the respiratory elements have been noticed a few years before the patient died that when headache was severe in amount of a high order.

Characteristics of the urine.

As already stated the amount of urine varies normally & when increased specific gravity is normal above the normal, healthy quantity urine albumin may be small in normal respiration

[illegible]

[illegible] the [illegible] [illegible]

[illegible] [illegible]

blood corpuscles.

The sediment when examined [illegible]

[illegible] the [illegible] of blood corpuscles are

[illegible] number of pus [illegible]

patient presenting the conditions indicated in the above synopsis begins to convalesce, the urine increases in amount and returns to its normal condition, the edema disappears and the patient recovers probably improves.

In certain varieties of the disease there may not be albuminuria or anasarca, the edema may disappear slowly and

[illegible]

[illegible] the [illegible] [illegible]

[illegible] confounded.

The sediment when examined will be found to contain the crystals [illegible] albumen and [illegible] were

[illegible] results of these the patient presenting the conditions [illegible] called to the [illegible] symptoms, [illegible] in convalescence, the urine increases in [illegible] and returns to the normal condition, the renal disease and the patient recovers probable improvement.

[illegible] of the cases [illegible] are not [illegible] of [illegible].

The renal [illegible] different [illegible]

the uraemic state, may extend to the lungs, and in that way cause dyspnoea. It may not always be the result of an oedematous condition of the lungs when it occurs with this disease. It may sometimes be brought on by the effects of urea upon the nerve centres.

Finally we may have uraemic convulsions developed, some have said caused by the poisonous effects of the accumulated urea upon the nerve centres, others say it is caused by the oedematous condition of the brain, as pressure from any other cause exerted upon the brain may produce these results. It is thought to be a

sufficient explanation in this case. Death may follow slowly or rapidly, sometimes, but if the patient recovers from the sufficient length of time other complications may arise, the most common of which are inflammation of the meninges, bronchitis, pneumonia, tinea pedis, or of the other lower extremities.

## Diagnosis

The diagnosis of this disease is made easily on the examination of the urine, which if carefully performed, will seldom fail to give sufficient evidence to justify a positive conclusion. The prominent facts are that the urine contains epithelial, fibrous,

and tubular epithelium of the kidney, albumen and blood and epithelial casts would be found. If the disease were interstitial nephritis the urine would be found to contain few or no casts and more or less albumen. If it were degenerative disease of the kidneys the urine would be found to contain casts and tube epithelium and degenerated epithelium. The urine would also occasionally be found in the disease.

Prognosis.—

The tendency of the disease in its first stage is to be curing, and with favorable circumstances in the usual course to certain termination of the cases known as either

The poisonous effects of the retained urea upon the nerve centres or the sense of the [illegible] organs.
Except from [illegible] [illegible] the prognosis is [illegible].
The effects [illegible] to disorganize the kidneys. It is self limited. It sometimes [illegible] assumes a chronic form.

## Treatment.

The indications in most cases of the disease are first to prevent the occurrence of structural change which may take place in the kidneys.
Second to prevent uremia or if it has recurred to prevent the retention of urea. Third to treat concomitant

symptoms and conditions as they may
arise.

The first thing to be attended to in the treatment of this or any other disease is to remove the cause or the conditions which are supposed to have caused it, that is, this being complied, proper hygienic measures, including the exclusion of all such as may be injurious, from intemperance if be has indulged and all other excesses.

If uremic symptoms appear, the elimination of the urine should be attended to and promoted. This may be done in various ways, if the symptoms such as uremia or indications of immediate danger, such as kidney diaphoretics, and

in the hepatic region, calomel may be used, if the symptoms are more urgent or indicate great congestion from the accumulation of concrement bile. Hydrotherapy, caused by the drastic, from active purgatives may be called into requisition. But the hard-and-fast use of the most expeditious means to eliminate the concrement, depriving the tragical effusion of bile, sometimes will be seriously hazarded by producing further disturbances, which may be done effectually by the hot air or hot injections, the patient being placed in the most favorable attitude to allow of the escape of gravelly matter a surrounding

temperature of about 90 degs. Fahr.

If this be found not to reduce the patient's temperature it may be repeated after some hours have elapsed. This may also be given by the use of diaphoretics as jaborandi or its active principle, pilocarpine &c, &c.

While this is being done measures should also be taken to remove the inflammatory products from the uriniferous tubules.

If the secreting function of the kidneys can be increased to such an extent as to wash out these products much will have been accomplished towards preventing further accumulation of

nervous and upon the circulation of the
extremities. Great care however must
be exercised in the selection of
remedies for this purpose and none
of the so called diuretics which
possess any irritant properties
should be used.
The most valuable agent we have
for this purpose is digitalis, either
powder or infusion which is neither
stimulating nor irritating to the kidneys.
It has its beneficial action
through the increased force of the
heart's action and increased blood
pressure, thus overcoming the
impediment to the renal circulation
and thus causing an increased flow of

of the urine and of the blood through the Malpighian tufts.

To experience the bad effects of this treating it should be given in large doses and frequently repeated.

Probably a large amount of liquid taken internally would wash out this washing out as it were the tubules so that [illegible] should be allowed to swallow the water that he may desire.

A combination of the above remedies will also tend to remove the dropsy which usually accumulates, but in cases in which it collects in such quantities as to be detrimental in any way, other means may be resorted to, such as the free use of drastic purgatives

among which may be named gamboge, podophyllum, elaterium &c. The last named is the one which is supposed to have the most active influence in this direction. Great care must be exercised in the use of cathartics not to carry the purgation to such an extent as to exhaust the strength of the patient or the very means which have been used with a good intent may hasten dissolution. The free use of diaphoretics may also aid in diminishing the dropsy. Probably of this class of remedies the best that can be used is jaborandi or its active principle pilocarpine, either of which when

administered causes an enormous amount of perspiration and in this way eliminates a vast amount of urea. It also increases the salivary secretion and may produce or cause a watery diarrhoea.
Other milder diaphoretics may be beneficial.
Some care may also be necessary in the use of diaphoretics, as they may be used to such an extent as to exhaust the patient.
When the uremic symptoms become so marked as to demand immediate attention, or to threaten coma and convulsions the hypodermic use of morphia will then have to be

extremely beneficial.

This treatment of these conditions is highly recommended by Ferris and others.

The almost uniform action of morphia in these conditions as observed by Ferris is to arrest the muscular contractions by neutralizing or rather by counteracting the effects of the uremic poison upon the nerve centres. Second to establish profuse diaphoresis; third to facilitate the action of the diuretics and cathartics, more especially the diuretic action of digitalis.

Chloroform has been recommended by some but it does not appear to have been proven to be successful treatment.

# Thesis

on

Differential Diagnosis of Heart diseases.

For degree, of Doctor in Medicine.

By

Swem P. Bostic.

Virginia

February 14th 1880.

# Differential Diagnosis of Heart diseases—

As time passes, and the world grows old & sciences progress—, The more it seems we cling to some ancient customs, and time honored ideas. From the early days of medicine and medical students a Thesis I suppose has its origin Perhaps then it was an 'Dissertatio seu Dissertatio' the unfortunate poseror of which had to publicly defend— But now during the progress of science & improvement of ancient ideas, it is only a

form, a useless expenditure of a students time, being never afterwards regarded by preceptor or professor. But I propose to be a Doctor in Medicine so much pertaining to its requirements.—

What must I write on? I would prefer to discuss the usefulness of a Thesis, but that I believe is not allowed. So something more difficult must occupy our time.

I shall try to give a few practical points in <u>Diagnosis</u> the sheet anchor of success in our practice. And as we are limited in space my say shall be on <u>Heart diseases</u>—

Its position, size, and relation to other part & organs; together with the normal sounds & murmurs are far too ultimate to require any suggestions. But as the pericardium will require many serious considerations, being subject to diseases that affect all <u>serous membranes</u>. It must be well understood both its <u>Anatomy</u> & <u>Physiology</u>

First then we will consider, <u>Pericarditis</u>- an inflamation of lining membrane of the pericardium.

Divided into three stages

I- Stage of congestion, constituting the same history & theory of all acute inflamation the migration

of white corpuscles &c. With the beginning of the effusion & sticking together of sides of the membrane.

Physical diagnosis of pericarditis must be based on the friction murmur. Which in this stage is always present.

It is caused by the small effusion of lymph & the separation or rubbing together of the thus roughened surfaces. It must be diagnosed from endocardial murmurs, and the first & main point is that it is a double sound & must be principally diagnosed from aortic direct & regurgitant murmurs coexisting. As has been said it is of

a rubbing or friction character and is not necessarily in direct accord with the heart sounds.

Moreover its intensity varies with the same sound, a most notable point. It may be better heard at the apex & will decrease as you go up. It is not heard without the pericardia - whereas many endocardial murmurs are heard some distance away, as mitral regurgitant. Again firm pressure with the stethoscope will increase its intensity. Finally it is superficial whereas the endocardial murmurs will be deep in the chest an important point.

Close observation to all these points should enable us with little trouble to differentiate & say positively to our anxious patients that no organic disease of the heart is present. and by cheerful words encourage them on to recovery. and a relief from a mental agony that has made miserable the lives of multitudes & brought not a few to an untimely grave.

2- We must look for Pleurisy.

The friction murmur may be caused by the rubbing together of the outer surfaces of the pericardium against the pleural surfaces roughened by effusions. This may be double

& will then resemble very much the true friction sounds of pericarditis. Extent of pleurisy & non-effusion in the pericardium occurs

This may also occur with pneumonia & we must be on our guard for these & like complications.

II- Stage of effusion from slight amount to filling of the pericardial sac.

The diagnosis now must rest almost with percussion & palpation

A pyriform tumor may sometimes be made out. This tumor will have its base at the apex of the heart. The heart will be raised & somewhat pushed to left side & the apex beat may be felt in

the fourth intercostal space.

Its situation must be made out by percussion, giving at times perfect dullness or flatness.

Auscultation absence respiratory murmur + vocal resonance.

With considerable effusion the apex beat may be lost, and the sounds of the heart are feeble and distant.

With marked diminution of fluid the friction murmur will return & remain untill the surfaces become agglutinated or the liquid be absorbed and thus passing the third stage so called. But the line is with difficulty drawn + for this reason

I should prefer to describe but two stages. The end of second stage being recovery or demise of patient. In diagnosis the etiology of pericarditis should be considered. As acute articular rheumatism Bright's disease & Pleurisy for as an idiopathic disease it is extremely rare.

<u>Endocarditis</u>, an inflammation of lining of heart walls, causing more or less roughness & weakening of the Chordi-tendinea, leaving the valves weak & incompetent of performing duty. Causing regurgitation of the blood currents.

In diagnosis (differential)

has been pointed out in describing pericarditis & will require little more to be said. It is sometimes found with pericarditis & is nearly always due to acute articular rheumatism. Its presence should excite our suspicions, & demand an examination.

Percussion generally shows compensative hypertrophy. The history of the case should be carefully ascertained as it gives us important points in diagnosis

With these points we should be able to diagnose some lesion inside of the heart. These are varied & will now be briefly considered.

Valvular lesions -

These are necessarily of a various character & involve points of diagnosis at once differential & difficult

We will divide into three groups

1st Lesions diminishing the size of the orifice obstructive

2nd Lesions enlarging the orifice regurgitant

3rd Those that roughen the surface over which the blood moves & not causing either obstructive or regurgitant

Obstructive - Mitral direct

This is a pre systolic murmur beginning after the second sound & ends promptly with the systole,

It must be diagnosed for aortic regurgitant & the position and place best heard should give all the necessary points. It is often limited to a small area around the apex. It is a rough murmur & may be quite loud. It is caused by vibration of mitral curtains when they are united at their sides.

Again this murmur is very limited & as we leave the apex it is less audible

Aortic direct. — This murmur is synchronous with mitral regurgitant; that is it is systolic and this should be sufficient diagnosis for mitral direct.

From mitral regurgitant by

by situation. It is heard best at base of heart in second inter-costal space, near the sternum & is often loudest on right side from Tricuspid regurgitant by being transmitted better to the right. A venous pulse synchronous with the systole points to tricuspid regurgitant. It is often absent, but when present may be considered corroborative.

II. Regurgitant murmurs forming a large number of heart diseases & often with a grave prognosis. Should be perfectly understood. And their differential diagnosis is of all importance

on our success in the treatment of such maladies: We will first consider the one most commonly met with. Due to the excessive muscular effort to send blood thro our bodys. Having been present in fully 2/3 of the cases of heart trouble at our clinic, and so well demonstrated by our eminent Professor of that branch.

Mitral regurgitant

A systolic murmur heard best at the apex, may be soft rough or musical its intensity being varied. It is best transmitted laterally around the left side. Posteriorly it is often heard

at lower angle of scapula
not infrequently at same place
on right side. If heard at
the back it is diagnosis complete
from endocardial murmur with-
out regurgitation

From mitral direct by relation
to heart sounds. The direct
stops promptly with the systole

From aortic direct by position
having as before said its maximum
intensity at the apex.

These constitute the principle
hearings likely to be confounded
& the above points closely attended
to should be sufficient for a
correct diagnosis.

Aortic regurgitant

This murmur is caused by insufficiency of semi-lunar valves it is regurgitant into left ventricle, so must be diastolic

It is the only organic murmur having this relation to heart sounds frequency on the left side

It is therefore easily discriminated from all other murmurs

It is almost always heard best at the base near the sternum may be transmitted downwards but is not laterally.

So far murmurs of the left side have only been considered forming a large majority

Tricuspid lesions of the tricuspid and pulmonary valves are exceedingly rare & will require only a short consideration.

Tricuspid lesions are direct and regurgitant. The former is exceedingly rare. It may be diagnosed from mitral direct by situation -

Tricuspid regurgitant while rare is much more common than the direct. It may exist from dilatation of right ventricle without lesions. It is of course systolic as mitral regurgitant & must be diagnosed principally by localization. It is near

the base and at right margin of the heart. Again a venous pulse synchronous with the systole is corroborative.

Pulmonic lesions only remain to be considered. I believe rare Pulmonic direct, is often congenital. It must be diagnosed from aortic direct & as both are systolic, the position nearly the same or may be the same, they will involve points difficult to make out.

The essential point is that a pulmonic direct is not transmitted to the carotid artery. While an aortic direct is always transmitted

The difference of pitch or quality on different sides of the sternum should show the co-existing murmurs. The one on the right side being transmitted to the carotid.

Pulmonic regurgitant.

This murmur is so exceedingly rare that little may be said.

It is diastolic & the absence of aortic lesions - together with other signs pointed point to pulmonic.

III — The third division are difficult to make out by physical diagnosis, and as our subject relates principally of physical diagnosis they will not be considered.

Thesis of
M. A. Thomson.
Feby 1880.

# Erysipelas

Erysipelas is a disease, so called because it generally, gradually extends to the neighboring parts.
We have the idiopathic and the traumatic, the former occurring without any known cause, the latter accompanying a wound.
Erysipelas may extend itself over any continuous surface, the skin the areolar tissue, the mucous and serous membranes, the lining membranes of arteries, veins and lymphatics are all liable to be affected.
It attacks the skin more frequently because it is more subject to wounds, the common exciting cause of the disease.
Therefore the external is much more

common than the internal variety.

The causes of this disease may be divided into the predisposing, and exciting.

The great predisposing cause of Erysipelas is the want of attention to hygienic conditions. Were the laws of hygiene observed as they should be erysipelas and the allied diffuse inflammations would rarely be met with in surgical practice.

The habitual use of stimulants to excess is a very common predisposing cause to this affection.

Some of the low, diseased conditions of the blood seem to predispose in the highest degree to the supervention of Erysipelas, such as chronic visceral disease, especially of the kidneys or liver, diabetes chronic diar-

rhoea or dysentery, depravation of food &c.
Any sudden source of depression may act as a predisposing cause to Erysipelas, hence in military practice it is known to follow in the wake of secondary hemorrhage.

The principal exciting causes of Erysipelas are epidemic influence, contagion, and the presence of a wound.

It is chiefly recent wounds that are affected, when once the red heave or suppurative inflammation is set up, the wound is not so liable to take it on unless in bad constitutions, the formation of limiting fibrin appearing to lessen the liability to the occurrence of the disease.

In our description of this disease

we will confine our attention to the ex-
ternal variety, which according to
Nunnely is divided into the Cutane-
ous, Cellulo-cutaneous and Cellular.
The cutaneous is the slightest form
of the disease, implicating merely
the skin.
Symptoms. Chill, headache, nausia
and fever preceding the local
manifestations for a day or two,
though the patient may not
feel any uneasiness until appear
ance of the rash or cutaneous
inflammation.
If there be a wound its secre
tions dry up and the margins
become slightly swolen and
affected by the red blush.
If the disease appear under path

ically, without a wound, it most com
monly appears upon the face especially
about the nose, ears & eyelids, next upon
the legs and lastly upon the trunk.
The eruption appears as a red spot
rapidly spreading into a large
patch, with pretty well defined
margins somewhat elevated, of a
bright rosy hue disappearing un-
der pressure, and attended with a
tingling burning sensation.
Except in the mildest cases vesicles
appear on the affected part, contain
ing at first serum which at first
is clear but soon becomes turbid
and dries into fine branny scales.
The redness may spread rapidly
along the limb or if the face be
affected may travel quickly from

one side to the other causing such swel-
ling of the eyelids, as to close them,
and giving rise to swelling and much
tensive pain in the ears.
The disease is almost invariably ac-
companied by some enlargement
and tenderness of the lymphatic
glands.
The constitutional symptoms are rath-
er aggrivated than diminished by
the appearance of the rash, the
period of defervescence usually coin-
ciding with the decline of the
local phenomena.

Mucu-cutaneous.

In this form of the affection both
the local and general symptoms
are more marked.
The inflammation involves the

subcutaneous connective tissue as well as the skin, the swelling being greater, the color darker, vesications larger and the pain more intense than in the simple variety.

This condition usually continues up to the sixth or eighth day after the invasion of the disease, during the whole of which time the constitutional symptoms have presented the ordinary type of inflammatory fever, about this time however a change usually takes place either for better or for worse.

If under proper treatment, and in a tolerably healthy constitution the inflammation subside, resolution takes place with a gradual abatement of all the symptoms.

If however as usually happens the disease runs on to more or less sloughing or suppuration of the part, no increase of the swelling, pain or redness takes place, but on the contrary some diminution of these signs may occur, and thus give rise to deceptive appearance of amendment. The skin becomes darkly congested and the part instead of being tense and brawny has a somewhat loose, soft and boggy feel, communicating a semi fluctuating, doughy sensation to the fingers. This indicates the formation of pus and slough beneath the integument, which can only be detected by careful palpation, hence the surgeon must daily examine with

his own fingers the side of the part in order to know the condition of the subjacent tissues.

While these changes are going on below the surface, the skin at first congested, becomes somewhat paler and assumes a white appearance rapidly forming into black sloughs and being undermined to a large extent by large quantities of broken up areolar tissue and ill-conditioned pus without any tendency to point, however extensive the subcutaneous mischief may be. These destructive changes expose muscles, fascia, blood vessels and may induce necrosis or destroy the joints. They are most apt to occur in those parts of the body which have the

lowest degree of virulency, hence are more common in Erysipelas of the leg than in the same affection of the scalp.
During the progress of these local changes the constitutional symptoms have assumed corresponding modifications. If the patient survive the sloughing and if the discharge continue abundant, hectic, with diarrhoea gastro-intestinal irritation or pyæmia may carry him off.
This disease is most fatal in the old and infirm, or in young children.

Cellular.

This form of the disease always arises from a wound or injury, often of a trivial character, and most commonly affects the subcutaneous

areolar tissue. Though commonly arising from ordinary injuries, it is especially apt to follow those in which there have been an inoculation of animal poisons. as from dissection wounds, the stings of insects and bites of venomous reptiles. In whatever way arising it is characterized by the rapidity and extent of the sloughing of the affected tissue, and great depression of the powers of the constitution. That the diffuse inflammation of areolar tissue, whether it be limited to a finger or implicate the areolar tissue of half the body, is a variety of Erysipelas affecting this texture primarily and the skin secondarily there can be no doubt.

Signs. There are great swelling

tension and pain in the limb which feels brawny in some parts edematous in others. The skin is slightly reddened in patches, has a mottled appearance and speedily runs into blackish slough. The extent to which the disease may spread varies greatly, when once it has set in, it commonly runs rapidly up the whole of a limb, extending also to the sides of the trunk, in other cases its violence appears to be principally expended at a distance from the seat of injury, thus in the case of a fractured wound of the finger the diffuse inflammation may take place in the plains of the cellular tissue of the axilla and chest.

Death may in this form of

the disease occur in two or three days or several week may elapse before a fatal result declares itself.

The constitutional symptoms are those of asthenic fever in the most marked degree; a quick and feeble pulse, brown tongue, and muttering delirium being early concomitants of this affection. Diagnosis of Erysipelas Cutaneous Erysipelas may be distinguished from Erythema by the fact that the latter occurs in patches of various size which have no tendency to spread are not elevated and do not form vesicles. The marked constitutional disturbance also is absent in erythema.

From scarlet fever the diagnosis may be made by observing the

circumscribed character of the Erysipelatous eruption, its well defined margin, the tenserus and glazed appearance of the surface, and the presence of vesicles.

Cellulo-cutaneous Erysipelas may be distinguished from ordinary inflammation, by the greater extent of surface involved, by the absence of any tendency to point, by the rapidity of its course, and by the typhoid type of the constitutional symptoms.

Cellular.

This form of the affection may be distinguished from common diffuse inflammation of the connective tissue, by the even greater rapidity of its course, and by the more asthenic type of its general symptoms.

## Prognosis.

The prognosis in erysipelas is always grave.

The simple form is usually a mild affection, and in the large majority of terminates in recovery. If however it involve the scalp or abdominal wall there is danger of its being transferred to the arachnoid or peritoneum, while if there be any visceral disease, such as Bright's disease of the kidney the slightest attack is likely to prove fatal.

The Cellulocutaneous and Cellular, are always very serious affections.

Danger in Erysipelas greatly depends upon whether the disease is traumatic or idiopathic, the traumatic being decidedly more dangerous.

Erysipelas in any form is a very

serous disease in young children.
very old persons, and in women in the puerperal state.

## Treatment.

A great deal may be done to prevent the development and spread of Erysipelas. Hospital wards or apartments occupied by the sick or wounded should be well ventilated, and scrupulously clean. A want, of these requisites may at any time produce erysipelas, whereas a careful regulation of hygienic laws its occurrence may most materially be lessened.

The curative treatment of Erysipelas may divided into the constitutional and local.

In cutaneous Erysipelas very

little medication is, as a rule required.
If the patient be constipated with a furred tongue, a mercurial purge may be administered. If there be much heat of skin, neutral mixture may be given, combined with camphor water if the nervous symptoms are at all prominent.
The loss of appetite will usually indicate the propriety of abandoning solid food, for which milk with lime water, and essence of beef may be substituted in small quantities at frequent intervals.
In some cases alcoholic stimulus may be serviceably directed but seldom is it necessary to give it in large quantities. two or three ounces of brandy in the course of the day

being usually quite sufficient.
Most cases of cutaneous erysipelas will run a satisfactory course under the above simple mode of treatment.
There can be no objection, however to giving the muriated tincture of iron which is a remedy of undoubted value in all forms of the disease.
In the Cellulo-cutaneous and Cellular, the patient may be put at once after attention to the state of the bowels, upon the use of the muriated tincture of iron which exercises a controling influence over this disease. This remedy may be given in large doses, as much as 20 or 30 minims every three or four hours. Quinia is another drug which may be usefully em-

ployed especially in the latter stages of the disease. Free stimulation may be employed in these cases from the very onset, and as the typhoid aspect becomes more developed, carbonate of Ammonia and oil of turpentine may be properly added to the remedies previously employed.

The local treatment of erysipelas is almost as important as the constitutional. In slight cases the part should be covered with rye flour or starch, should be kept at a uniform temperature, enveloped in carded cotton wool, being the most efficacious, cold applications should never be employed.

The local abstraction of blood and serum from the inflamed part, by making a large number

of as all punctures which lessens the tension and swelling, and consequently diminishes the inflamitory action. In the Cellulocutaneous and Cellular more active measures are required. The punctures or incissions should be made in the early stages and more freely. Warm fomentations should be constantly applied and antiseptics used not only in the dressings but injected among the tissues by syringing.

If the suppuration be very profuse the fomentations may be omitted, and the part being simply covered with cotton well carded. The now relaxed tissues being supported by the gentle pressure of a bandage.

A Thesis on
Typhoid Fever.
Dedicated
to
Provost, Regents and Faculty of Physic,
of University of Maryland.
for the
Degree of Doctor of Medicine,
by Francis J. Flannery of Md.
Sessions 1879 "80

# Typhoid Fever

Typhoid, or, more appropriately called Enteric Fever, is a continued fever characterized by cuticular rose colored spots, accompanied by diarrhoea and with specific lesions of the small intestines.

The onset of this fever is more gradual than that of any other fever. The patient complains of languor and weakness, loss of appetite and headache, more or less severe, for several days. Coughing, rigors and Epistaxis are likewise among the early symptoms. This gradual onset, before the true development of the disease, is known by some as the precursory, or prodromic, period, by others as a distinct stage of the disease.

The latter view seems to be the one most generally accepted. The duration of this stage is about ten or twelve days, the average being five. After this stage the patient is compelled to take to his bed on account of the fever which is of more or less violence. The countenance presents no important change for the first ten days. Afterwards the face is marked by a purplish discoloration, which is more or less prominent, according to the intensity of the involvement of the capillary circulation in that region. This condition of the countenance becomes more characteristic as the disease advances. Soon this discoloration begins to spread over the entire body, and, next to the face, is most noticeable on the hands and arms. The redness

disappears upon pressure, but soon returns. The red or purplish hue is due to capillary congestion and is very similar to that produced by the action of cold. Frequently the conjunctiva, if inspected, will be observed to be congested to a moderate degree.

In order to describe the disease from this point it will be more convenient to take the symptoms according to their anatomical system.

Symptoms afforded by the Nervous System — The patient complains of cephalalgia during the first week. This pain in the head is not always a prominent symptom; neither is its character so intense as that present in the first stage of inflammation of the meninges, nor is it accompan-

ied by any intolerance of light or noise. Sometimes the patient complains of a pain in the back, but this is of very little diagnostic importance

In a large majority of cases delirium is manifested in the second week, sometimes not until the third or fourth. In exceptional cases it may arise during the first week, and rarely, when the patient first goes to bed. In different cases the delirium varies in degree sometimes being slight, at others very prominent As a general rule it is not of a violent character. The first evidence of the mental faculty being implicated is temporary confusion of ideas upon being aroused. The patient is unable

to recall his position, and asks questions incoherent in character. This delirium may increase; the patient talking incoherently and muttering as if he were asleep and dreaming. Sometimes frequent attempts are made to get out of bed and dress. He tells the attendants, questioning him as to his desires, that he wishes to go home. The nurse can, in most cases, persuade him to lie down, but he soon makes another attempt to get up; and if not carefully watched will repeat it over and over. One characteristic mark of this delirium is that it is greater during the nocturnal hours and in some patients may be only

manifested during this period of the twenty-four hours. Occasionally it, instead of being of the low and muttering kind, may be characterized by noise, activity and violence. The patient shouts and struggles violently to arise; so violently sometimes that the attendant is compelled to resort to constant and determined efforts to quiet him.

Irrespective of delirium, during the progress of the disease the patient's mental condition is characterized by torpitude, want of animation, and total indifference to his own condition and necessities. He neither asks for food, drink nor change of position. Very

often he voids his urine, or feces, not because of a paralyzed condition of the sphincters which control these actions; but through indifference. The sense of hearing, besides other special senses, is involved to a greater or less degree, according to the intensity of the disease itself. Insomnia occurs during the first few days; the sick person suffers great discomfort, if not danger, from the want of that sleep, which is most important. If sleep should intervene, it is of such a nature that the least noise will wake him, but immediately relapses. This sort of half-asleep and half-awake condition has been properly designated as the "Coma-Vigil state". It is the want of true sleep which gives rise to this coma-vigil and delirium.

The other grave symptoms and signs referable to the nervous system, are attempts to grasp imaginary objects, or "Carphologia", pulling at the bed coverlets or other linen, twitching of the various muscles and tendons, most notably those of the face and extremities. A very peculiar movements of the tendons of the wrist, perceptable to the touch, presents itself. This latter condition, or appearance, is called "Subsultus Tendinum".

The symptoms furnished by the digestive system:— As a rule the appetite is diminished or lost, but in exceptional cases may be preserved during the entire course of the disease. The thirst is generally increased, and though the patient may not ask for drink, yet, if it be presented, will

accept with it with great avidity. The tongue is furred, and the teeth and gums covered with sordes. The color of the tongue coating varies, generally being of a yellow, brownish or even black hue. Exfoliation of this coating and a clean, red and moist surface being left, is a sign of convalescence. Tumulousness of this organ generaley proceed graver symptoms. The gums may be red and, in mild as well as severe cases, tend to bleed upon pressure. Vomitting may occur, but most likely it is due to over feeding.

Diarrhoea is present in nearly every case and from this fact it is one of the characteristics of the disease. The reaction of these liquid stools is alkaline. Some cases

mated of presenting diarrhoea, are marked by constipation. Occasionally hemorrhage from the bowels occurs, and is due to some of the blood vessels of the intestines becoming involved in the ulcerations.

Among other symptoms which are abdominal, are meteorism or tympanites, tenderness on pressure, and gurgling in the right iliac fossa. The abdominal walls are very often distended and if percussed will give a decided resonant sound. This distension and its concomitant resonance, are due to the gas which is present in the colon or other parts of the intestinal canal. Perforation of the intestines and a resulting peritonitis occurs very often. The intensity of the disease

does not foretell this complication, because peritonitis may, and often does, occur in cases characterized by mild symptoms; likewise it may occur in the period of convalescence.

The Skin:- The most important of the symptoms furnished by this organ is the marked eruption. This eruption generally appears on, and in most cases is limited to, the abdomen. It consists of papulae, lucent in character, and and have been denominated rose colored spots. It appears generally between the seventh and fourteenth days. These disappear on pressure.

Perspiration is ~~increased~~ present in many cases even before its occurrence before death or during

convalescence. Though this symptom is present in some fatal cases, yet in the majority of cases it may be welcomed as a sign of improvement, though it is not absolutely determined whether it produces the amelioration, or is the result of it.

Respiratory System:— The cough which is almost invariably present, and which is not a prominent symptom, unless it be the result of a pulmonary complication, is slight and moderate, and is generally due to congestion of the mucous membrane. Pulse— The heart's action is more or less accelerated. The gravity of the case is determined, to a certain degree, by this acceleration, the dan-

ger being considerable if the beats exceed 120 per minute. Sometimes the pulse is below the normal, falling to 60, or even 40. The force of the pulse is diminished in proportion to its frequency, this being due to the increased action, not increased power, of the apex of the ventricle. Hence if auscultation be resorted to during the progress, the first sound of the heart will be found to be diminished, sometimes almost inappreciable. The Temperature. As a general rule the heat of the body is increased, the increase being gradual for the first three or four days. Of late years the temperature in this disease has become a

symptom of considerable importance in regard to diagnosis. Some practitioners claim that, if the thermometer shows a rise of 104° on the second day, it is not enteric fever; the same exclusion being applied if the temperature falls below 103° between the fourth and eleventh days. As a rule after the fourth and to the end of the second week the thermometer registers 103° in the morning and 104° in the evening. A sudden rise indicates the existence or commencement of a complication, usually Pneumonia or Peritonitis, thus rendering the prognosis more grave. If the temperature suddenly descends below normal, other signs of improve-

ment or convalescence being absent, the prognosis is likewise of a grave character.

The urine. During the progress of the fever the urine is scanty, high colored, excessive in urea and uric acid, with deficiency in the chlorides, and, in severe attacks albuminous in character. This latter condition is unfavorable, though in the majority of cases depending upon no structural disease of the kidneys, but merely upon congestion. Very often owing to the apathy, or indifference on the part of the patient, the urine fails to be expelled and hence the physician should daily examine the abdomen by manual

palpation to ascertain the condition of the bladder and, if necessary, to interfere with the catheter.

The Pathology and Causation.

The ultimate pathology of this disease is not clearly determined, though many erudite pathologists have advanced the theory that it is a general and systemic disorder, characterized by intestinal lesions their seat being mostly in the glands of Peyer. The question whether this poisonous matter deposited in Peyer's glands before ulceration is of a specific or non-specific nature is still sub judice. Others suppose that many persons are predisposed to it by inheritance and that the diathesis is of a nature analagous to the tuberculous

gouty, or rheumatic. This latter proposition, though not absolutely established, seems to be very probable. The exciting causes are very numerous. Depressing causes of every kind excite it; among them the most notable being foul air, mental and physical exertion; badly ~~constd~~ constructed traps; noxious gases from sinks, cesspools or water-closets; and above all the introduction into the system of a portion of the excreta of other typhoid patients whether it be direct or indirect.

Anatomical Characters.

In this disease there are lesions which are especially characteristic and which serve to distinguish it from Typhus fever. The agminated, or Peyerian glands, the

solitary glands, the mesenteric glands and the spleen, and occassionally other organs or parts are affected.

The agminated and solitary glands are first enlarged by the presence of a material commonly called Typhus, which is deposited in the glandular sacks. The patches are elevated above the neighboring mucous membrane, which assumes a purplish or pinkish color. Besides being enlarged they are indurated. The patches situated nearest the caecum are generally attacked first. From each successive patch above this portion of the intestinal canal. The next process is that by which the mucous membrane, glands, and the typhus material therein contained are sloughed away.

This condition generally commences about the end of the second week and the last of the series of patches begin to ulcerate about the end of the third week. These ulcers are characterized by their edges not being elevated, but overlaped by the mucous membrane, which they undermine. Should the patient be on the road to recovery, these ulcers begin to heal up, the healing process being accomplished by the formation of a thin membrane, serous in character, at the bottom of the excavation. This membrane gradually becomes thick, until its cicatrization is completed. But should the ulcers fail to cicatrize they will perforate the wall of the intestine and thus

give rise to a dangerous complication by the escape of fecal contents and intestinal gases into the abdominal cavity. This complication is obviously Peritonitis which is diagnosed by the usual signs and symptoms peculiar to it.

There are several other anatomical lesions which are of importance, but not present in every case, such as softening of the walls of the heart, minute inflamation (very rare), enlargement and softening of the spleen, and in some cases the kidneys are congested in others unusually pallid.

Diagnosis. The distinctive characters are now so well recognized that very little difficulty is encountered in diagnosis.

The only diseases from which it may be hard to discriminate, are Typhus and remittent fever. From remittent it is distinguished by the absence of vomitting, the slower onset, the mental condition and abdominal symptoms. From Typhus by the presence of epistaxis, bronchitis, lenticular rose spots, tympanites, obscure origin and diarrhoea. In Typhus fever there is no epistaxis, no bronchitis; the bowels are constipated; abdomen seldom tympanitic; milliary eruption lasting two or three days, and cardiac Very obvious.

Prognosis. The mortality in this disease differs greatly according to age, sex and complications. Few die under

the age of ten, than between ten and twenty. After thirty its fatality increases, and after fifty the death rate is nearly one half. Should peritonitis from perforation intervene the case becomes more grave. In every case there is a possibility of this latter complication; hence the practitioner must be guarded in his language, never expressing himself too strongly for it is known that this perforation often occurs during convalescence and thus causing a relapse which is generally fatal.

Treatment. It must be remembered that Typhoid fever is a self-limited disease and when once established there is no cutting short its progress. The

duty of the physician is to support the patient and conduct him through the different stages in such a manner as his skill and knowledge will dictate. He should always be on the watch for the various symptoms of gravity, or otherwise, in order when they arise, to be more prepared to alleviate or check them by the resources at his command. This then is the Expectant treatment, and one which has given the best results in this disease. If the bowels are constipated during the first few days a mild laxative may be given with great caution as it may intensify the diarrhoea which generally follows. A drachm of castor oil will suffice and then no

more means which tend to this effect should be resorted to. When there is diarrhoea in the commencement it must be checked, not suddenly but gradually. Chalk mixture will in many cases be sufficient, if not, give Sub-nitrate of Bismuth or a pill composed of the following: viz: ℞ Opium, Camphor and blue mass each ½ of a grain. When the skin is dry and hot sponge with tepid water and vinegar, or whiskey. Some Practitioners recommend the use of the cold bath or wet pack. The patient, in the former, is plunged into the water which is of a low temperature. But this method has a great many disadvantages and among them

shock. A better plan, if the cold bath is to be used, is to place the patient in a bath of the temperature of 80° and then gradually lower it by the addition of ice to the water, watching its effects upon the patient and acting in accordance. Diaphoretics may likewise be used with propriety if the skin is exceedingly hot. Among this class of remedies Spiritus Mindererus is one of the best adapted for this state. It should be given in ℥ss doses, diluted, every two or three hours until the required effect is attained. When the fever is low then stimulants must be used, there being none better than brandy, wine or Huxham's tincture. Great care

must be exercised in the administration of the alcoholic stimulants. As a general rule they should be administered when the systole of the heart is found upon examination to be diminished in force. If the alcoholic stimulants act well it will be indicated by the tongue regaining its natural appearance. Abdominal pain may be overcome by the application of flannel wrung out in warm water and sprinkled with turpentine. Should the patient be unable to sleep hypnotics may be given. The following is very good. Viz: ℞ Pulv. Opii gr fs; Pulv Camph. gr fs Cheene. gr ii M. ft. Pil no 1 sig. To be given at night. Turpentine is given internally to

counter act the ulceration of Peyer's patches. The commencement of the ulcerative process is indicated by a dry and glazed tongue. It acts as a stimulant and alterative to the ulcerated surface. Dose gtts v x in emulsion of Gum Acacia. As the case improves diminish the oil. Quina may be given, but not as an antipyretic. For experience and observation has determined that it has no such effect in this particular fever. Not withstanding this there are a great many able men who hold an opposite view in regard to the action of Quinia.

As the patient is not alive to his wants you must wake him in order to

to make him take food and draw off his urine to prevent retension.
Bed sores must be avoided by frequent change of position in bed.
Should Peritonitis occur from perforation too of the intestines by one of the ulcers then the bowels must be kept in a constipated condition in order not to agravate it. This can be accomplished by the administration of large and frequently repeated doses of opium. The other complications which may intervene must be met with the usual remedies.
During the various stages of the fever the patient must be supported by suitable food. This food must be of a liquid

nature. Milk and lime water, wine whey, beef tea or other animal broths must be given in small and separated amounts, watching the effect. Above all give the patient plenty of fresh air, taking care not to allow him to be chilled.

The convalescence is long and tedious. During it the patient must carefully avoid all excesses either in food, drink, or exercise.

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Thesis

J. Harvey Craver.

Session 79 80.

Influences which modify the action of Medicines

# Influences which modify the action of Medicine.

[illegible]

ing the action of medicines are so va-
rious that this is a subject is unli-
mited [illegible] confusion
[illegible] of [illegible] [illegible] a
subject of consideration to the student
of medicine. In the administration of
medicines we must allow of three influ-
ences they are. First; the condition
of the [illegible], [illegible] the [illegible]
of the [illegible], [illegible] [illegible]
surrounding, I will first speak
of the [illegible] [illegible] [illegible]
[illegible] [illegible] [illegible]

series [illegible] [illegible] in which they

grow. Also the manner [illegible] [illegible]

prepared, and the care [illegible] [illegible]

after they are purchased, as [illegible]

medicines undergo change [illegible] [illegible]

to [illegible]. [illegible] [illegible] [illegible]

proper use while others [illegible] [illegible]

especially) - by evaporation - become

stronger, and in this way it [illegible]

unsafe to administer in the [illegible]

dose; other forms of a medicine [illegible]

its [illegible]. Pulverizing a solid substance

renders it more active [illegible] [illegible]

its solution in the [illegible]

a [illegible] rendering [illegible] [illegible]

[illegible], The [illegible] [illegible] [illegible]

[illegible] of [illegible], the action [illegible]

medicine is greatly modified by the dose,
and the varied effects of [illegible]
medicines in different doses, multitude
of the greatest [illegible] in the
treatment of disease. The [illegible] Dr
Ross of Ohio, [illegible] a stimulant
to [illegible], while larger well stimulates,
[illegible] doses of [illegible] and also
[illegible] while larger [illegible] [illegible]
the [illegible] [illegible], which in small
doses [illegible], in another [illegible] [illegible]
[illegible]. In fact the size of the dose
and time of its [illegible] affect the
operation of a medicine as much as
its inherent qualities. When medicines
are [illegible] for the purpose —
[illegible] a sustained action [illegible] the sy

[illegible] extremely short, [illegible]

[illegible] effects are entirely different from

that produced by administering the [illegible]

[illegible] dose. Thus, — a large amount

of electric stimulus administered at one

taking would result in a [illegible]

while a the same amount [illegible]

[illegible] would [illegible] shock, —

again if a large [illegible] of [illegible]

it would [illegible] a shock, while if [illegible]

given in small doses, [illegible]

intervals [illegible], it would [illegible] — [illegible]

a rat — [illegible] [illegible] the [illegible]

while it requires large doses of the [illegible]

to affect the system, the [illegible]

of [illegible], [illegible] [illegible]

[illegible] to be [illegible]
[illegible] [illegible]
able [illegible] probably [illegible] it [illegible]
[illegible] to [illegible] [illegible]
[illegible] [illegible] [illegible]
[illegible] medicines. At [illegible] [illegible],
vegetable [illegible], [illegible] [illegible]
[illegible] [illegible] [illegible]
of the physiologist. The [illegible] [illegible]
medicine, or system, must [illegible], in some
cases, be one that prevents the [illegible]
-eral action of the medicine, for [illegible]
[illegible] [illegible] [illegible]
Illustration of [illegible] [illegible]
[illegible] by digitalis, [illegible]
[illegible] [illegible] [illegible]
[illegible] than real, we might call the

[illegible]

because it [illegible] [illegible]

reduced [illegible] such [illegible]

seeming such to be the case, it is of [illegible]

practical importance [illegible] [illegible]

the effects of [illegible], and [illegible]

[illegible], and [illegible], [illegible] lives, as it brings

the occurrence of sudden and dangerous

[illegible] [illegible]

Diversities occasioned by Latitude. It is not

difficult to separate the influence of [illegible]

from that of climate. [illegible] is generally

found that the foreigner who has

some [illegible] [illegible]

of life peculiar to the natives of his new

residence, requires a similarity of susce-

tibility to the action of medicines. [illegible]

[illegible] that the [illegible], and [illegible]
[illegible] longer [illegible] [illegible]
and [illegible], but it is only in [illegible]
that it implies [illegible], that [illegible]
is of great value — As to age,
it seems but natural that it should [illegible]
a great influence over the action of [illegible]
— primary instincts and childhood, [illegible]
dependence is [illegible] on the [illegible]
other powers of the system than the
[illegible] of [illegible],
[illegible] to the organism as [illegible]
[illegible]
[illegible] the exclusion of all
[illegible]

[illegible] in mind, that in [illegible]

[illegible] should be selected which liberate [illegible], and are not dangerous of given [illegible] class. As a general rule, deple[illegible] should be avoided; cases are rare [illegible] it is necessary before the seventh year. Ordinary evacuants at this period [illegible] rarely be given, especially mercury, and [illegible]. The narcotics are also to be [illegible] with extreme caution & still [illegible] reduced by disease — the [illegible] [illegible] to [illegible] [illegible] In this class of patients stimulants are [illegible]

be continued with most medicines in general,
[illegible] large doses of [illegible]
disease as a rule, and they should be
[illegible] from the remedy class, as much
as possible, [illegible] most [illegible]
bitter tonics. Salines are for the most
part to be avoided, [illegible]
[illegible] be made with care, such as the
[illegible], and [illegible]
[illegible] state of the skin, [illegible]
[illegible] the [illegible] of the
is not [illegible], in the [illegible] the for-
ms. — Females are more susceptible to
[illegible], than males, the actions of
[illegible] are generally more [illegible],
[illegible] regular, than in males, it is
[illegible] [illegible] than

[illegible]

[illegible] valid universally as there are, as we say, "reasoning [illegible] pure" constitutionally as well as morally, [illegible] apart from this, [illegible] inferior to some [illegible] and dangerous [illegible], [illegible] more. They cannot stand [illegible] elements, in doses as large as men, [illegible], it is thought they require larger doses. They require [illegible] more [illegible] medicine frequently, such [illegible]. Actual treatment of such [illegible] by medical [illegible] [illegible] this is especially to be remembered [illegible] of frequency, as abortion might [illegible]

broken up, during bad health, all main [illegible]
[illegible] of [illegible] [illegible]
will, should be [illegible] with [illegible] the
[illegible] cause [illegible] of the [illegible],
Influences of disease — [illegible] diseases,
have a great influence on the action of
[illegible] It should be borne in mind,
that, whenever the secretory functions are
[illegible] from [illegible] [illegible] though
[illegible] are also less active, there [illegible],
in all fevers and other diseases,
mercurials and narcotics [illegible] strongly
[illegible] the skin [illegible] are [illegible]; they
[illegible] diuretics, [illegible] [illegible] the
[illegible] of [illegible] and [illegible] the [illegible]
[illegible] are in like condition, [illegible]
or mischievous, In those cases in

may be considered that the [illegible]
[illegible] of the affected organs, and thus,
increase the action of the [illegible]. That
is, from reasoning from analogy, [illegible]
[illegible] stimulated. The [illegible] of
testing at a low grade, with more or less
[illegible] of the nervous system, and [illegible]
in the functional disorders. Into [illegible],
which marks some forms of insanity, the
susceptibility of the organs are increased,
and results hyperaemia, or [illegible] [illegible]
in unusual doses. Still more remarkable
is the susceptibility of insanity, or certain
nervous affections, to [illegible] [illegible]
stimuli. On a word, — what we have
[illegible] regarding the action of medicines
may have been [illegible] by a [illegible]

upon the healthy, or [illegible]

[illegible] the sick [illegible] [illegible]

[illegible] modes of [illegible] action, depending upon conditions peculiar to the patient [illegible] and the nature of the complications of the disease.

Adversus :- Many persons are affected by certain medicines, or other agents, in a manner quite peculiar to themselves, and for which no rational explanation can be made. Similarly there is a [illegible] peculiarity, in other cases, it will only produce unfavorable [illegible], [illegible] in the consideration of some [illegible] [illegible]. We know of a gentleman who cannot take Iodide Potassium, it [illegible] him. paroxysms of neuralgia, [illegible]

[illegible] instance where the smallest [illegible]
[illegible] [illegible] to
[illegible] organs and, it sometimes [illegible]
[illegible] of [illegible] [illegible]
an instance where emotion, of anger, and
caused [illegible] to the [illegible] system,
that producing sensations like [illegible],
and [illegible], after [illegible]
same effects. — another instance, where
a female was [illegible] [illegible] horrified,
to expect [illegible]
[illegible] and breathing [illegible]
[illegible] [illegible],
resulting [illegible] [illegible]
[illegible], or [illegible],
[illegible], or [illegible] has caused [illegible]
[illegible] and itching, or [illegible]

[illegible] [illegible]
[illegible] Mercury, in the smallest
doses, [illegible]
[illegible]
troubled are very numerous, and
in [illegible] [illegible],
not so well [illegible] are still [illegible]
[illegible] from the [illegible], - And
[illegible] to remember, that these [illegible]
[illegible] are not confined to drugs alone
[illegible] fond people so constituted, that [illegible]
[illegible]
sensations, altogether unaccountable.
There is scarcely a [illegible], [illegible]
[illegible] [illegible],
[illegible] articles of diet, there may
be more or less of the imaginative [illegible]

[illegible]

[illegible] all measure, by any means,

[illegible] that it is recalled for, as they

are [illegible]

[illegible]

[illegible] is impossible to reduce the operation

of medicine, to any fixed laws, and

that here it is very evident, that

[illegible] judgment is worth a

[illegible]

We have [illegible]

[illegible] that is, the [illegible]

[illegible] action of medicine, [illegible]

[illegible] [illegible]

[illegible] of [illegible] habits [illegible],

[illegible] is hardly necessary to separate [illegible], from season, in all we shall say about these, The [illegible] of [illegible] [illegible] things, is [illegible] warm climate [illegible] [illegible], & the [illegible] of [illegible] [illegible] [illegible] [illegible] billious. The [illegible] of [illegible], & [illegible] constitutional effects, [illegible] [illegible] [illegible] not [illegible] [illegible] [illegible] of the [illegible] effects upon the [illegible] but [illegible] it is [illegible] [illegible] [illegible] and debility [illegible] [illegible] severe in their action in a warm climate than cold, and [illegible] [illegible] [illegible] [illegible] serious effects, [illegible] [illegible] [illegible]

[illegible] alternate from a cold, [illegible]

[illegible] [illegible]

[illegible] [illegible]

leaves, [illegible]

[illegible]

[illegible]

Thus, during the protracted heat of certain summers, there is a tendency [illegible] susceptibility, [illegible] [illegible] [illegible]

[illegible] [illegible]

their mode of operation. It is well known that the vital functions, pass through different cycles of activity [illegible] [illegible] [illegible] [illegible] power of resistance to hostile influences, where it has been invigorated

in the night watches, but which produced its [illegible], until [illegible] time once more induces sleep. Hence all narcotics, and medicines intended to [illegible] internal [illegible] their effects, are more especially [illegible] in the evening, when the natural [illegible] may [illegible] condition to [illegible] their action. The same is the period for the administration of cathartics, of the [illegible] and gentle alteratives, and in general of all medicines which [illegible] to be absorbed, and remain in the system. On the other hand, the [illegible] action, of [illegible] medicines, whose nature is to produce a [illegible] is most efficiently [illegible] by their administration in the morning, when [illegible]

stomach, and bowels, are [illegible]
[illegible] of the [illegible]
and perfect fruit, — the course, [illegible]
— which the [illegible] [illegible]
-ses — [illegible]
and mode of life, is shown by the [illegible]
[illegible] of nutrition [illegible] of [illegible] and
actually [illegible] [illegible]
in the system, and therefore, much [illegible]
unnatural in [illegible] [illegible],
[illegible] figures, which [illegible]
[illegible] in [illegible],
to [illegible] [illegible] [illegible] it is [illegible] known,
[illegible] [illegible] [illegible] [illegible]
as the [illegible], [illegible] [illegible],
[illegible] [illegible] [illegible] [illegible],
[illegible] have to eat [illegible] [illegible] [illegible]

...ing, without experiencing narcotism, purgative medicines, lose their power of moving the intestines - and in a great many other instances unnecessary to mention.

It is difficult to account fully for this peculiarity. It may, to some extent, be due to the saturation of the system, but it is more probably attributable to nervous action, as we know that [illegible] [illegible] [illegible] [illegible] As [illegible] [illegible] [illegible] [illegible] the [illegible] of a particular stimulant allow [illegible] [illegible] [illegible] [illegible] [illegible], [illegible], [illegible] may tend to lessen the susceptibility to medicines, which [illegible] [illegible]

[illegible] must not lose out of sight the important law of the nervous system which [illegible] to, [illegible] conforming to the law, that medicines must be given in increasing doses to maintain an uniform effect, are to be found in various drugs - for instance, Mercury, when the system has been brought [illegible] to [illegible], [illegible] small additional dose will produce the complete effect. The medicine is sufficient to saturate the excretory [illegible] - [illegible] time; and every additional dose may therefore be expected to produce its peculiar effect. Further [illegible] is presented by the operation of Emetics, [illegible] they are not [illegible]

rapidly succeeding [illegible] repeated
attacks [illegible] from [illegible],
smaller [illegible] and at last, the [illegible]
idea of the [illegible], [illegible]
[illegible] to be [illegible] by the influence
of mental states in general, when the
functions of the stomach —
For [illegible] come to consider the influence which
the mind exerts over the action of the [illegible]
-vital [illegible] The [illegible] of the [illegible] are
often so real, and at times so wonder-
-ful as to [illegible] [illegible] with the [illegible]
of [illegible], yet they [illegible] with
[illegible] when the patient being [illegible]
with a firm faith, in the success of the
prescribed remedy, [illegible] [illegible]
[illegible] established in the secret of [illegible]

[illegible] of [illegible] [illegible], [illegible]
[illegible] [illegible], [illegible] knowledge of the
[illegible] and the use of medicinal [illegible]
are superior to those in these [illegible]
to control the [illegible] of the [illegible] and
[illegible] unfortunate [illegible], in the
[illegible] [illegible] [illegible], the
judicious use of the [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible]
because the means of acute [illegible]
[illegible] [illegible] [illegible] [illegible]
[illegible] [illegible] [illegible], but [illegible] [illegible]
[illegible] with faith, may [illegible] [illegible]
[illegible] [illegible] effects. [illegible]
[illegible] [illegible], [illegible] [illegible]
[illegible] [illegible], [illegible] [illegible]
[illegible], [illegible] [illegible], [illegible]
[illegible], Colored drabs, may relieve

[illegible] reads, formerly, clerk, [illegible] — In this connection, it is sufficient to refer to the [illegible] [illegible] [illegible] [illegible] [illegible], and hope and the determinant effects of a [illegible] [illegible], and the [illegible] manner not only in the conduct of the sick, and their [illegible] towards health, but absolutely [illegible] issue of the disease.

In conclusion (but [illegible] [illegible]) we must say, the successful [illegible] is not the [illegible] [illegible] [illegible] [illegible], it is possessed with medical prescriptions, for all diseases — B[illegible] [illegible] who, in each particular case, knows not only what [illegible] [illegible] [illegible] [illegible]

[illegible] to remove the [illegible] and [illegible]

[illegible] [illegible] rate means of diabating

[illegible] [illegible] [illegible]

influencing [illegible] function, in such

manner as to [illegible] [illegible]

[illegible] [illegible] [illegible]

# A Thesis

on

The Physician

his

Duties and Responsibilities

submitted

to the

Faculty of Physic,

of the

University of Pennsylvania

for the

Degree of Doctor in Medicine.

by

Charles Henry Lemon

of

Pennsylvania.

~ 1880 ~

[illegible] was not made to [illegible]
and [illegible] men and [illegible] just
[illegible]
taste, be it a trade or profession
[illegible] among the [illegible]
more honorable than that of the
[illegible]
and [illegible]
[illegible]
are metaphysical or mental, more
[illegible] hours, and when they have
[illegible] work, they are at liberty to go
and come, as it may seem best to

[illegible] for their studies some are [illegible] to regulate their work so that it may not be kept unfavorable work [illegible] they wish, and are thus [illegible] from their office. Other pupils [illegible] than either of the [illegible] and are of such a character that they can be arranged to suit the [illegible] of each pupil. But the Pupil [illegible] for his studies the use [illegible] of Physics, from inorganic Chemistry to the building of that organic [illegible] which [illegible] it [illegible] to read. [illegible]

[illegible]

is not his own, for he knows not at [illegible] and so his work is never done. He [illegible] prepared to meet many [illegible] emergencies. He should occupy the highest and most exalted station in the community in which he moves. His duties are many, and we draw back to mention some of them. In the first place [illegible] at his office hours, if not called on [illegible] professional duties. He should be devoted in earnest, it is the [illegible] of medicine [illegible] credited with the [illegible]

[illegible]

[illegible] improve the present, and not wait for the future. He should [illegible] to have [illegible] passage [illegible] only [illegible]. He must [illegible] on which hinder or hurt his progress. He must also remember that he has children in his profession, and must defend their rights as he would have them to defend theirs [illegible] he will show himself worthy of the [illegible] to [illegible] [illegible] to ask [illegible] one new question every day, for to be "the best Physician one must also be a Philosopher".

one line using only two words
should strive to reach the first line.
Upon, entertaining this idea of re
pression and legal aid, the author
[illegible] and sign the legal
matters to his satisfaction. It is a
most disinterested solution. He has
the protection of the [illegible]. It is
brought in contact with men
and women in their worst and
[illegible] in their most [illegible].
There are [illegible] of the sick room
that are forgotten as of those who
have duty to attend, until [illegible]
if [illegible]. The unfortunate
half [illegible] [illegible]
[illegible] [illegible]

attend a person during sickness
[illegible] of that person is placed in his
hands. This is a most sacred
trust, and he should endeavor
to understand the case in all
its [illegible]. This is [illegible]
of [illegible], and the [illegible]
the [illegible] of [illegible] is
not indeed so [illegible]. Judge [illegible]
responsibility [illegible]
by the [illegible], and if cases [illegible]
and beyond art, then to mitigate
the suffering, and if death is near,
make the [illegible] as
as [illegible]. In [illegible]
[illegible] what he is [illegible]

[illegible] we should all [illegible]
[illegible] [illegible]
that we [illegible] through [illegible]
[illegible] [illegible] [illegible]
the [illegible] [illegible] [illegible] [illegible]
one who will give all the necessary
directions for the relief of that [illegible].
This is a great responsibility, and
if one feels it a responsibility
what must many be? The Pastor
who has many under his care has
no light task, and upon him lies
a responsibility that should not be
forgotten, but must weigh upon
most due his mind. Even in the
[illegible] case repose thought and at
tention, and in not giving it this he

neglects his duties and is not worthy
of his Alma Mater. If a man
takes the life of another he is
considered murder, he is punished
for it and justly so. But if a
Physician grossly neglects a case
with once taking charge, he can
through his neglect the patient
dies he is guilty of a crime worse
than murder. Shall he not
be not with all the power and
ties, and allow his patient to die?
The Practitioner of medicine should
not practice merely to get a living
or a name but to benefit mankind
and that is the end

[illegible]

[illegible]

[illegible]

[illegible]

[illegible] professional services to the pub-

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible] he will not be long in losing

[illegible]

He must be patient, and through

practice [illegible]

[illegible]

When the plague is spreading
over the country, it will be with difficulty
adopted. It is not [illegible] to
flee as others may, but should
his post, have the board of health
and show to aid his fellow-men,
even though it cost him his life in the
struggle. He should be kind to
the poor, and entreat the humane
[illegible] among them may not be
any remaining longer at his
duty to relieve their afflictions
if possible, and add to his
good works which will be remembered
by the Great Physician.
It is obligatory upon him to be
acquainted with the class of

[illegible] he was. He should under
stand why he was there, what
he should do, what the extent of his
knowledge was, for what purpose he
He should understand himself
that he may treat others
under his proper relations
towards them. He should not forget
that we discover in man high
support and sympathy, and
he must keep up with them, and
will need to pray. He should not
confine himself to one book
only, but have a wide range
that he may form different
views, and then out of the

ment the vim is right. It
[illegible] to [illegible]
[illegible] feeling and tastes, one that
vim, [illegible] will get the [illegible] to
suffers [illegible] nothing compared to
that he is compelled to inflict
upon others. If in the course
duty it is incumbent upon
him to deal the cup of happiness
from some fond mother's lips
should he it gently and tenderly.
He will often stand by the death
bed and see [illegible] to
bring [illegible] which
other would be glad to give. It is
duty a duty he owes to himself,
his profession and the public

at large, he remember that his
[illegible] [illegible] [illegible]
not to [illegible] it. If he is [illegible]
[illegible] [illegible] [illegible]
[illegible] [illegible] [illegible]
[illegible] [illegible] [illegible]
it [illegible] and conscientiousness.
It is the custom [illegible] to [illegible]
particular branches of medicine
and make specialties of them.
This can only be successfully done
in large cities where the physician
will be [illegible] [illegible]
[illegible]. He [illegible]
be acquainted with the different
forms of disease. He [illegible]
a [illegible] [illegible] [illegible]
to understand [illegible] that

[illegible]

has a dread or even fear [illegible]

the cure out of sight, and the

duty is to be faithful in [illegible]

life and then [illegible]

[illegible]

[illegible] of the [illegible]

on the [illegible] body [illegible] it

[illegible]

at our time must be [illegible]

doubts, feelings of [illegible] and all

others great and decided [illegible].

He should search for and find if

possible the well spot in the

patient and [illegible] that; for [illegible]

[illegible] better in [illegible]

radical cure or so doing, than
[illegible] the world [illegible]
was alone. The experienced Physician
[illegible] aware of this, [illegible]
in his profession. Even a [illegible]
medicine [illegible] cautious [illegible]
as it is so [illegible]
and the comparative success of
different individuals is decided
by their strength and industry
[illegible] sight and [illegible] [illegible]
[illegible].

"He that wishes to be counted among
the [illegible]
[illegible] must look to the acquisitions
of others." Rambler.

and when a difficult or fatal case
could not be attended
with success, [illegible]
contagious disease, [illegible]
[illegible] with [illegible]
[illegible]

It is not worthy of the [illegible]
that [illegible] the [illegible]

The rule applies to produce [illegible]
be burned, [illegible] or [illegible]
There is no danger, and all who
act, will assuredly receive the [illegible]
they so justly deserve at the hands of
an outraged public. [illegible]
will be [illegible] [illegible]

the high and honorable calling of which he is a disgrace to mem-
bers. Every one that [illegible] in-
formed a calling must assume that while it is one of the oldest
professions it is the most [illegible]
trades. Some note it with the idea
that it is the road to wealth. Such
a person enters the medical profession
[illegible] to [illegible]
[illegible] all the [illegible]
studies that he has relative to his
calling, the better will it be for him.
It is true money is expected
to earn his living from his profes-
sion and never find fault to the
that he should be rewarded by a

[illegible]

the rest and [illegible] of the [illegible]

[illegible] should not [illegible] [illegible]

[illegible] [illegible] [illegible] [illegible] with [illegible]

the rest of the [illegible]

are more [illegible] [illegible] [illegible] [illegible]

the [illegible]. He takes an [illegible]

take you [illegible] [illegible] [illegible]

"I want others see you [illegible] [illegible]

them do unto you," and he [illegible]

[illegible], [illegible] [illegible] [illegible]

and [illegible]. Many times the [illegible]

[illegible] of the [illegible] and [illegible]

and [illegible] of the [illegible] of the

[illegible] attendant upon the [illegible]

This must be [illegible] [illegible]

It is at times he is [illegible] [illegible]

not see the [illegible] —
[illegible]. The [illegible]
[illegible]
[illegible] are so well expressed by
Doctor Watson that we cannot [illegible]
the pleasure of quoting some of his words:
"The profession of medicine, however, is
at least the common ground of human-
kind, where nothing of the animos-
ities, of political strife, and of
sectarian dissensions. Disease and
pain the sole conditions of its exer-
cise, it is dissociated [illegible]
concerning the [illegible]
[illegible]
[illegible] without [illegible]
[illegible] count it,

and [illegible] and [illegible] and to
[illegible]
the [illegible] which [illegible]
the favorite handmaid, It i[illegible]
the [illegible] that [illegible]
takes [illegible] to the [illegible]
[illegible]
[illegible]
[illegible]
[illegible]
[illegible]
of the whole body [illegible]
sickness [illegible] the [illegible]
of [illegible]
by our forefathers [illegible]
[illegible] to the [illegible]
ment, which [illegible]

[illegible]

[illegible] the [illegible]

[illegible] it is [illegible] to be [illegible]

Familiar with death in its [illegible]

[illegible] [illegible] [illegible]

[illegible] [illegible] [illegible]

[illegible] [illegible] [illegible]

[illegible] [illegible] [illegible]

precarious, and our time, even at

the longest [illegible]

between moral wants, and intellectual

[illegible]." Now [illegible]

what it is that the Physician

has to attend to, [illegible]

that he [illegible] to
that he is, for he is only the
[illegible] instrument [illegible]
power, but he can make him [illegible]
a most [illegible] instrument [illegible]
[illegible] of the [illegible]. The [illegible]
[illegible] that [illegible]
a wise man can depart this life
he would live the life [illegible]
[illegible] he will [illegible]
to God, to [illegible] to [illegible]
and when the [illegible] close [illegible]
that end be peace, and be wise in
all things [illegible] [illegible]
[illegible] who has the most [illegible]
weightiest of responsibilities will do
great and faithful [illegible]

## Morbid Dissection.

[illegible]

[illegible] Colon [illegible]. The stool, consisting chiefly of mucus, is often mingled with blood. [illegible] is limited to the Colon, but in [illegible] ulceration may not extend above the rectum.

Secondary Ulceration

[illegible] bowel affection, that is

[illegible]

[illegible] the accumulation of [illegible]

[illegible]

[illegible] but more in [illegible] the [illegible] [illegible] the [illegible] [illegible] [illegible]

[illegible] cases have [illegible] to need [illegible].

[illegible] [illegible] to [illegible] over the [illegible] and [illegible]. The [illegible]

[illegible]

[illegible] [illegible] [illegible] [illegible] [illegible] marked are certain

the [illegible] as [illegible]
dark and almost black at a
distance from Campbell[illegible].
[illegible]
[illegible]
[illegible]
[illegible]

[illegible]

[illegible] solid character. [illegible]
[illegible] occasional [illegible]

[illegible]

[illegible] the [illegible]

[illegible] the characteristic [illegible]

[illegible]

is denoted by the characteristic

[illegible] calcareous concretion [illegible]

[illegible] blood is commingled.

[illegible]

[illegible] revealed, [illegible]

[illegible], abundant and [illegible]

[illegible] salty like [illegible] [illegible]

[illegible] the rusty shell of

[illegible]

[illegible]

[illegible]

[illegible] [illegible]

[illegible] that [illegible]

are of a green color. If the

characteristic dejections be

[illegible]

[illegible]

[illegible] matter the greater part

[illegible]

[illegible]

[illegible] stool is caused by the

inflammation of the rectum,

[illegible] cause a

sensation as though the bowels

were filled. At other times is

[illegible]

[illegible] often the drawing [illegible]

c

[illegible]

[illegible] tenderness in [illegible]

[illegible] as more or less marked

[illegible] the descending colon.

[illegible] sitting occasionally occurs,

and Prof. Flint—cases, marked

[illegible]

led. Delirium may or may not

occur, though it occurs

[illegible]

cases which end in recovery.

It also occurs in cases which

[illegible]

[illegible]

[illegible]

[illegible] accelerated; but when the inter-
[illegible] incidental rises of the commencement of the disease the
[illegible]

As for the duration of the disease
it [illegible] usually
terminates in from five to
twenty days.

[illegible]

The disease is a subcutaneous
inflammation of the large air
[illegible]

[illegible] th Hiemalis,
[illegible]
[illegible] demolo [illegible] vanadi
[illegible] in the phenomena of the
[illegible] constitution
[illegible]
[illegible] occurred to occur
[illegible] limbs. Different
[illegible]
[illegible]
[illegible] Section, that the
[illegible] ne, so it seems,
afford insufficient evidence,
at all [illegible]
[illegible]
[illegible]

[illegible]

[illegible] ticken. At [illegible] als ein

[illegible] an [illegible]

[illegible] more

[illegible] nacken wie ein [illegible],

[illegible] wie die Frucht [illegible]

[illegible] Cacao, [illegible] [illegible]

[illegible] [illegible] [illegible],

[illegible] one

[illegible]

[illegible] clearness of ideal antecedent

[illegible]

[illegible], and retaining the

[illegible]

[illegible]

ble to influence of heat.

(Woods.) One of the most

[illegible] of the excellent

[illegible]

[illegible] unchanged and

[illegible] substances [illegible]

[illegible]

[illegible] [illegible] the [illegible]. [illegible]
other causes that may [illegible]
[illegible]
acid fruits in large mean
[illegible]
[illegible]
[illegible]
[illegible]
[illegible]
[illegible]
[illegible] acted [illegible] the [illegible]
[illegible]
[illegible]
[illegible]

dependent. Conclusions, then, are
not warranted for the assum-
[illegible]

[illegible]

[illegible] hearsay. Inaccura-
[illegible]
[illegible]
[illegible]
[illegible] and inconclusions of
[illegible] incidental to

[illegible]

[illegible] frame and

[illegible]

in the abdomen. Often it

[illegible] if contract are

sufficient for the [illegible].

[illegible]

[illegible]

[illegible] usually means prolonged [illegible]

death. It is however a

[illegible] disease [illegible]

[illegible] with danger to the
[illegible] patient. The [illegible]
[illegible]
[illegible] alarming. The [illegible]
[illegible]
[illegible]
[illegible]. [illegible] the [illegible]
continues without amendment, the greater is the danger,
[illegible]
of the [illegible]
the [illegible]
[illegible]
[illegible]
[illegible]
nails the symptoms became
more alarming.

recovered.

A great

[illegible] remedies have been

[illegible]

[illegible]

[illegible]

[illegible] would dou-

bless end in recovery, with-

out medical treatment, but

there is no doubt, that the

[illegible] is often accelerated by

these remedies. The prac-

tit in determining on the

treatment is, to ascertain if

[illegible]

[illegible]

[illegible] admirable to remedy

efforts of nature more

complete by giving a

[illegible]

[illegible] hus [illegible] (Howard)

[illegible]

Cadar oil. After a full

[illegible] no [illegible] the remedies to be

[illegible]

[illegible] the disease and [illegible]

[illegible] in full dose [illegible]

[illegible] pièce et [illegible] intérieur.

[illegible] Rinnerts van Deen.

[illegible] eau.

[illegible] nave [illegible]

[illegible] de [illegible] dans

[illegible] de [illegible]. Ils [illegible]

[illegible]

treatment should be con-
[illegible] remedy being given in [illegible]
[illegible]
[illegible] rehments to be taken [illegible]
[illegible] mended by some authors,
not only in the commencement
of the disease, but during
[illegible] of the disease. [illegible]
[illegible] causes of [illegible] heard of
[illegible]
[illegible] Dr. [illegible]
the same hand to the disease

[illegible]

[illegible]

food, a diet as [illegible]

as possible. If the [illegible]

-toms denote failure of the

[illegible]

[illegible] patients are to be [illegible]

[illegible] tonic remedies [illegible]

[illegible]

[illegible] convalescence. the patient

[illegible]

[illegible] as much as possible

[illegible] repeated acts of [illegible]

[illegible] As far the

[illegible]

[illegible] and

[illegible], applications

[illegible]

A. F. Baton.

A Thesis
on
Pneumonia.
by
Alfred G. Giles
of Md.
for the Degree of M. D.

# Pneumonia.

Definition. Inflammation of the substance of the lungs.

Varieties.

Croupous or Lobar,
Catarrhal or Lobular, and Interstitial.

Morbid Anatomy.

Croupous or Lobar commences with hyperaemia of the small vessels, which are distributed in the walls of the air-cells and bronchial passages, swelling and tendency to proliferation of the epithelial cells of these parts and exudation of inflammatory lymph and of the corpuscular elements of the blood.

Consequently the air-cells and passages become more or less filled with this exuded matter, the air which they contain being expelled; and, the lung tissue becoming solidified. Microscopical examination, will show the blood vessels to be distended with corpuscular elements, and the alveoli full of epithelial or modified epithelial cells, which have probably undergone some fatty degeneration, and other cells of the character of leucocytes or pus corpuscles. As the disease progresses, these products part with more and more of the character of pus.

As the inflammation tends to spread, different portions of the lung present marked differences of condition, and consequently; the different portions may present different stages of the inflammation. Catarrhal or Lobular.

In this form the lung is found to contain small red or yellowish circumscribed solid nodules, which do not inflate when the lung is inflated. If they are situated near the surface of the lung, they present small rounded elevations. These nodules will be found to consist each of one or more pulmonary

lobules; circumscribed, by the inter-lobular septa, and separated from one another by a net-work of still crepitant and perhaps perfectly healthy lung tissue. By a further extension of the disease neighboring patches may coalesce thus involving extensive tracts of lung tissue. Lobular and Lobar pneumonia; here pass into each other. Lobular pneumonia is always secondary to the blocking up of the smaller air passages; it may be excited immediately by the gradual extension of the inflammatory process from the tubes, to the air cells,

or by irritation of the cells, caused by the entrance of these inflammatory products during inspiration. The microscopical appearances are similar to those of lobar pneumonia. The connection of lobular pneumonia with obstruction of the tubes, is shown by the facts, that lobular collapse, is often associated with it, and that the collapsed and pneumonic conditions, are found to pass into each other.

Interstitial.

This form is usually considered chronic in character. Aside from infiltrated tubercle

or tuberculous pneumonia; the name is used to denote a morbid condition, characterized by a morbid growth of the connective tissue of the lung. It differs from the forms already described, in that the air cells are found to contain no morbid products. It is denied by some that it is inflammatory in character. The pulmonary tissue is dense, tough and resisting. The air is expelled from the vesicles by pressure of the morbid growth of inter-cellular tissue; consequently, producing more or less contraction of the lung.

Causation.

Pneumonia like the other acute diseases of the respiratory organs, is due in the greater number of cases to exposure of portions of the surface, or a drenching, or by prolonged exposure of the whole surface to a degree of cold. It is most common in those climates, and, at those seasons, in which the temperature is subject to sudden variations; as, for instance, in the temperate climates, Spring, is the most common period. It occurs oftener in males than in females, and is far more common among the

working-classes than others; facts which may be explained by the increased amount of exposure to the causes of pneumonia of those who have to earn a livelihood by the "sweat of the brow".
It may also be caused by the spread of inflammation from other parts; such as the inflammation of the bronchial tubes, in cases of bronchitis, diphtheria, whooping-cough, measles etc. Other causes which may be mention are the inhalation of irritant gases and the mechanical irritation caused by the inhalation of particles of dust or other such substances,

Various systemic conditions may act as exciting causes of the disease, such as pulmonary congestion, the existence of specific poisons, in the blood, as in renal diseases, and the various exanthemata. And it is probably due to these causes, that pneumonia so frequently occurs, in the course of the various infectious fevers, erysipelas, rheumatism & kidney disease heart disease etc. The disease may be traumatic in origin. In many cases of acute pneumonia occur when no cause can be assigned for its development.

The causes of interstitial or chronic pneumonia are obscure. In a very few

cases it may have been preceded by acute pneumonia. In the majority of cases, the disease is secondary to some previous pulmonary affection; many of those conditions of the lung, which are embraced under the head of pulmonary phthisis, are succeeded by or connected with this form of pneumonia.

Symptoms.

Idiopathic pneumonia is generally preceded by a prodromic period of one or two days, which is indicated by a general feverishness or undefinable feeling of illness. This may be followed by a sudden

and severe rigor or succession of rigors; and the usual symptoms of more or less severe inflammatory fever. The respirations are usually hurried, and shallow, and may vary in frequency from the normal, up to fifty or sixty in a minute: and they are usually attended with expansive movements of the alæ nasi. Dyspnœa may be, or, or less severe. At first, there is more or less cough, of a dry character, which is afterwards attended with the expectoration of a transparent and viscid mucus, tinged with blood, to which the usual name of brick-dust or prune is given. Later in the disease

the sputa loses its sanguinous tint, and becomes somewhat opaque and greenish, or acquires a muco-purulent character and gradually diminishes in quantity. In some cases, the expectoration may become distinctly purulent, and may be attended with great fetor, which usually indicates pulmonary gangrene. The quantity and quality of the expectoration may vary greatly, in different cases. It is characterised by an increased amount of sodium chloride, and contains considerable quantity of mucus and albumen. This may vary in amount. In some cases, there is no pain whatever, and in

some, the patient has a severe stitch whenever he coughs or draws a deep breath, it is pleuritic in character and is probably due to coexisting pleurisy. The pulse is always increased in frequency, but rarely proportionately. The respirations, instead of being as 4 to 1, sinks to 2, or 1½ to 1. In adults it may range from 80 to 120, and in children, it may rise to 200 per minute.
The character of the pulse varies in different stages, being often full and strong in the beginning and becoming more or less feeble and thready. The tongue presents different appearances, sometimes,

thickly coated with fur, and in some cases it is dry and brown. Sordes may accumulate on the teeth, and there is also loss of appetite.
The condition of the bowels may vary, sometimes not particularly affected during the disease, again they may be constipated, or diarrhoea may exist. The face may be flushed and somewhat livid. The skin is dry and hot but profuse perspirations may occur during the decline.
During the febrile stage of the disease, the urine is scanty and high-colored, and of high specific gravity. There is diminished quantity of sodium chloride, and an increased amount

of urea, and uric acid, due to the increased metamorphosis of tissue. During convalescence, the urine returns to its normal amount and constituents. The patient may become drowsy; though he is apt to be restless, especially at night. Delirium may come on early, at first, being limited to the night, but afterwards may become more or less continuous. In fatal cases, delirium may pass into coma. Temperature usually rises rapidly from the time of invasion, so that perhaps within 24 hours, it has attained its maximum, which may vary from 100 to 106° Fahr. or even higher.

From this time onward, it may vary with morning remissions, and evening exacerbations until the time of crisis, which may be at or about the seventh day, when it either suddenly or gradually falls. In fatal cases the temperature occasionally rises rapidly just before death. The symptoms of secondary or lobular pneumonia, may not be so marked in character as the above. They may creep on insidiously in course of other affections, which may have produced pulmonary symptoms; such as difficult breathing, expectoration, cough and embarrassed cir-

culation, etc. The onset is not usually marked by a chill or anything equivalent to rigors; nor is there so much febrile disturbance, which characterizes the idiopathic variety. This form of pneumonia, may be looked for in patients, who are suffering from those diseases, which are liable to be complicated by it, and can only be determined, by careful investigation of the physical condition of the thoracic organs. The symptoms of a case of interstitial pneumonia are rather obscure, there being no marked febrile conditions, indicating,

its occurrence. Probably, the first thing which will indicate positively its existence, is retraction of the chest wall, over the affected portion of lung. With this retraction there may be dragging pains in the affected side, and cough, with expectoration. Difficult breathing is not usually marked. The disease being chronic in character, there is gradually loss of flesh and strength, and sometimes night-sweats may occur.

Physical Signs.

The physical conditions of the lung vary with the different

stages, and the progress of a case, through its various phases, is gradual; yet there are three different stages, in which it presents more or less characteristic features. The stages are first that of engorgement, second, that of red hepatization, and the third, that of gray hepatization. In the first of these stages, the lung or portion of the lung affected, still contains some air, consequently, percussion will give no marked difference from normal percussion resonance. Upon auscultation, the presence of minute crepitation or sibilant râle, may be audible: during inspiration, and sometimes

may be heard during inspiration. In the second stage, the air having been expelled and the lung being consolidated, the physical signs elicited will differ much from the normal. There is marked dulness on percussion over the consolidated portion of lung, with increased vocal fremitus. Vesicular respiration of normal lung and the crepitation of first stage will have entirely disappeared over the affected part, and is replaced by marked tubular breathing. The character of the cough and voice may be somewhat changed during this stage. In the third stage, when resolution takes place, or the

lung tissue is breaking down the tubular breathing is replaced by a coarse crepitation or a mucous rale, and there is gradual restitution of the pulmonary percussion note, and later if resolution continues, the normal respiratory sounds will gradually reappear.
The physical signs of interstitial pneumonia differ somewhat from those of the other forms. The percussion sound will be duller than in cases of catarrhal pneumonia. The respiratory murmur is either feeble or absent, or heard only over small areas, or it may be

bronchial in character. Mucus rales of large and small size may be heard, having a clash metallic quality.

Diagnosis.

The only affections with which pneumonia is likely to be confounded are pleurisy, bronchitis, and phthisis. In children collapse of the lung, may be mistaken for lobular pneumonia.

The disease may be distinguished from pleurisy, by the absence of sharp pain, and by the crepitant rale, and rusty sputa. In bronchitis, there is no dullness on percussion, and the disease is always bilateral.

Prognosis.

The prognosis to a considerable extent depends upon the age of the patient. When occurring in the child, or in very old persons, the prognosis is extremely unfavorable. The lowest rate of mortality is between the ages of 15 and 25 years, most cases occurring between these ages, if uncomplicated, will recover. The prognosis is also influenced by the extent of the disease, it being most favorable when but one lung is affected; its gravity increasing as the extent of the disease increases; double pneumonia being extremely grave. Complications also increase the gravity

of the disease, the occasionally frequent, with it are hearing, cardiac disease, Bright's disease, etc. Symptoms denoting special danger are extreme elevation of temperature for several consecutive days, with very rapid pulse. Marked disturbance of the nervous system, always indicate a grave form of the disease. Delirium coming on early always indicates danger.

Treatment.

Various plans of treatment have been employed, with repeated success for pneumonia, each having had its day and advocate. From the days of Sanne, to extract the middle of the pneumo-centric,

the antiphlogistic method, or the combined use of blood letting, antimony, and mercury, was used. Since the days of Dr Todd, there has been considerable reaction in the method of treatment, the antiphlogistic method having been replaced by the free use of stimulants. It is evident however that neither of these methods, is the proper treatment for every case of the disease. The requirements of each case, will vary as the conditions of the subject of the attack. The treatment is not to be directed so much to the disease, as to the conditions presented by each individual case; while one may

be benefited by depletion, while
many require stimulation. In the
majority of cases, probably, the expectant
treatment is the best that can be
adopted; treating the individual
symptoms as they may arise, during
the progress of the disease. If the
patient be in full habit, probably
the best thing that be done,
during the first or second stage is
to use general blood-letting; or
probably, in the majority of cases
presenting a plethoric condition;
local blood-letting would be
sufficient. Antimonials are recommend-
ed by some authorities, during the
febrile stage: ~~also~~ during this stage

also, antipyretics may be used advantageously, among them quinine seems to hold its sway now to lower temperature. Diaphoretics and diuretics may also be used, if symptoms arise which indicate their use, and also tonics during convalescence.

Clinical Reports
of
Six Surgical Operations.

By F. Hooper Shepherd.
1880.

Amputation of the Thigh by Dr. A. H. Bayly.

A negro man aged sixty four years, engaged in hauling lumber, had his left leg crushed by a piece of timber catching it against a gate-post. This accident occurred on the 10th of July, 1878 in Cambridge, Md. Dr. Alex. H. Bayly being summoned, found upon examination that the lower fifth of the thigh and the upper third of the leg was reduced to a jelly-like consistency. The man was sitting up, and did not seem to suffer much. There had been very little hemorrhage, and it had stopped when Dr. Bayly

and I first saw him, about ten minutes after the accident. He was sent to his home in a cart, the doctor and I following soon after with an amputation case and chloroform. Amputation was decided upon, because of the impossibility of saving the injured extremity. The patient was laid upon a table, which was placed before a window. I administered the chloroform, and a proper degree of anæsthesia being produced, the operation was commenced. The doctor arranged his instruments, and raised the limb to be amputated, to facilitate the

venous flow, and then placed the tourniquet so as to compress the femoral artery when tightened. The leg being properly held by assistants he made his anterior flap about four inches long, including as much of the bruised tissue as was practicable, so as to avoid taking away more leg than was positively necessary. Then passing the knife under the bone at the base of the anterior flap he cut the remaining tissue with a downward sweep, making the posterior flap. The flaps being retracted by an assistant the bone was di-

vided with the saw about an inch above their base, the periosteum being previously pressed upwards. The fractured end of the femur was trimmed, and not splinted as was supposed. The femoral and profunda arteries were tied, and the smaller ones twisted. The nerve trunks were pulled out a short distance and snipped, to prevent them from being 'caught' in the cicatrix. The edges of the flaps were adapted to each other, and secured by silk sutures and strapping, an opening being left for drainage at the most depending portion.

The anaesthetic was stopped and the patient was placed in a bed before he revived. The bed was of a hard mattress with an oilcloth between it an the sheet. A pillow was placed under the stump covered with an oilcloth in order that all of the discharges could be washed away before becoming offensive. Carbolic water dressing was used for the stump. A grain of opium was administered and the patient was left in charge of his wife with instructions to keep the parts clean and to repeat the anodyne if necessary.

The sutures were removed five days afterwards, the patient being in good condition. He was allowed good nourishing diet but no solid food was given him for two weeks. I left home for the sea-shore just after the operation, but the doctor assured me that the man (although an old man, and the weather was very hot at the time of the accident & operation) recovered without a bad symptom, and was out on crutches two weeks subsequently. This statement the patient confirmed when I next saw him.

Herniotomy by Prof. Alan P. Smith -
On Sunday December 10th, 1879, Prof.
Smith was requested by Dr. Harrington
of South Baltimore to perform "Herni-
otomy" on a woman on Light St.,
who had a strangulated inguinal
hernia which could not be re-
duced by taxis. She had had
no old hernia, and this was
caused by lifting a large
filled market basket on the day
before. She was suffering with the
usual symptoms caused by such
an obstruction - pain in the ab-
dominal region, vomiting &c. -
without using an anæsthetic. The
Professor performed the operation by

candle-light. Shaving the hair from over the seat of the hernia, he made an incision from the neck of the sac through the integument over its entire length. Each layer of tissue was then slit up over a director consecutively, down to the sac. No bleeding of any consequence occurred, each vessel being tied when it was divided. The stricture was then cut several times about an eighth of an inch upwards, but the hernia remained irreducible. He then opened the sac upon the director, passed through an opening made by a scalpel. A

portion of the omentum was found enclosed with the intestine. The sac was ligated and removed, the professor saying he had never seen a bad result by so doing in this operation. I saw him do the same thing about a month previous, the patient being a man of 45, (odd years without any bad result.) The intestine appeared congested, of a blue color, but was not gangrenous or perforated, so was returned into the abdominal cavity. The wound was closed except the lower end, by pins, and a compress previously immersed in cold water,

was placed over it, and secured with a spica bandage. A quarter of a grain of morphia was given her and she was left in the charge of her physician, who was advised by the professor to repeat the anodyne if necessary at proper intervals and to direct a small quantity of whiskey. Upon inquiry five days after, I ascertained by request of Prof. Smith, the patient's condition. She stated that she had not suffered much since the operation, but was yet taking small doses of opium. There had been no action of the bowels and she had been

kept on light diet. The pins were taken out by her physician four days after the reduction and the wound was healing rapidly, water dressing being the only local treatment.
Six months subsequently Dr. Hutchings reported her entire recovery.
In this case and the one mentioned above no anæsthetic was used, although it is not customary and is advised by most authorities on very proper grounds.

Ovariotomy, by Prof. Alan P. Smith.

Mrs. ---- was admitted into St Vincent's Hospital, Baltimore, Md., in November 1874, as a private patient. She had been suffering from an enlargement within the abdominal cavity for four years previous, when, just after the birth of her last child, it was first discovered. Prof. Smith, after an examination diagnosed it to be a multilocular ovarian tumor, and decided to remove it by extirpation. The patient was prepared for the operation, and the day appointed being clear, it was performed. Prof. Smith first instructed his assistants in respective duties, arranged his instruments re-

spired, having them placed in a solution of carbolic acid, and directed the patient to be anaesthetized. The carbolic spray was directed over the site of the operation and the professor's hands until the wound was dressed.

Proper degree of anaesthesia being announced, the first incision was made about three inches long in the median line, commencing about one inch below the umbilicus. The integument, areolar tissue and different layers of fascia were successively cut through until the peritoneum was reached.

Be then made a cross incision through the peritoneum, large enough to pass under a director, on which he slit it up. Slight hemorrhage was stopped temporarily by forceps. The cyst was brought into view by retracting the lips of the wound, its surface being slightly rough. Then introducing his hand, the operator carefully felt for adhesions, but found none, except a few "threads". Each "cyst compartment" was then punctured with a large trocar, attached to which was a rubber tubing to carry the fluid contents to a

tub at the side of the table upon the floor. While it was being drained, it was secured by vulsellum forceps, and the abdominal walls were supported. The wound being slightly enlarged, the sac was gently pulled through the opening, and the pedicle was seen to be long and narrow. Prof. Smith therefore determined to secure it upon the outside by a clamp. He then most particularly sponged all the fluid out of the cavity which had unavoidably gotten into it, and closed the wound. But placing the clamp, he secured with sutures

the tumor from its pedicle, and applied perchloride of iron to the stump; then with silver sutures brought the lips of the wound close round it.
At the lower end of the wound was inserted a hard glass drainage-tube, which prevented the collection of purulent matter in the cavity. Antiseptic lint and cotton was placed over the incision and held in position by strapping.
A belt of wide bandage was passed round her waist to support the abdomen, and assist the intestines to

resume their natural position.
The patient was put in a bed immediately, her temperature then being all than 100° F., and was never after more than that degree. The patient left the hospital for her home in Virginia within three weeks after the operation convalescent, and afterwards reported her complete restoration to health and happiness.

Excision of a Fatty Tumor by G. C. Shepherd.

The patient, a man aged twenty-five years, requested me to examine a tumor in his back in April 1879, stating that it had been there more than five years but had caused no pain or inconvenience until about a month before I first saw it, when it became painful and caused sleeplessness. To himself it seemed it had changed its position, moving downward. I diagnosed it to be a lipoma, it being to the touch, soft, lobed and fluctuating. It was ovoidal in shape externally, and was as large as a teacup. It was situated over the left kidney and by its position forced him to

avoid lying on his back. I adopted
position to which he consented.
He wished to "cut his throat", and
said he would not require an
anæsthetic. I placed him before
a window leaning with his
hands resting upon the sill.
I cut through the integument
over the length of the sternum
and bore it down. It bled by
pushing my index finger under
it. There were required two ab-
dominal stitches.
The cavity left by its removal
was quite large, and when I
closed the upper sternoxiphoid
remained a cavity. I then stitched

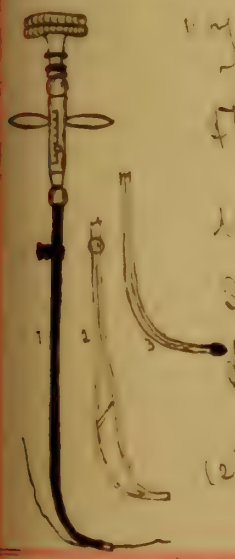
a drop bag of muslin into it and left the wound open, dressing the patient's quite. Three days after the operation put the bag, and with it came out an ounce of pus. The edges of the wound were red and painful, and the man said he had not slept well, but examining the bottom of the cavity he found the healthy granulations. He then pressed the edges with hand, applied a warmed flaxseed-meal poultice over the part, supporting it in position by a bandage round his waist, and directed him to take an opiate at night. In

The tenth day after the operation, the wound had entirely healed and only a slight redness remained, and on two days subsequently that disappeared. The wound was cleaned with carbolic lotion every day and a new bandage applied.

A Tight Organic Stricture of the Urethra — Treatment by Dilation by J. H. Shepherd.

Mr. B ——, aged twenty three years, applied to me in December 1879. to be treated for a chronic discharge from the urethra. He had contracted gonorrhœa about two months previous, but said he had been cured, except a few drops, which now and then oozed from his meatus urinarius. His stream was small and twisted, and I at once suspicioned a stricture. I oiled and warmed a number fifteen American Sound, and introduced it into his urethra. As I had expected, I found a stricture at the usual place — the

junction of the membranous and spongy portions. I then injected a small syringe full of warmed oil into his urethra and felt smooth sounds and finally, only hesitated in passing through a hidden gland-bearing lacuna. I diagnosed the constriction to be a tight organic stricture. The patient consenting, I determined to "dilate or tear up the morbid tissue" with Thomson's dilator.



"This instrument, as represented by the figure, (1) can be screwed up to say twenty-one, American scale." By turning the handle the blades may be separated (2), the amount of separation be-

ing required upon one meter in the handle." At the curve end is a short tunnel, which is to be passed over a wheelbone bougie frequently, passed through the stricture, & lubricated until it is passed through. This is at times more difficult than to have the instrument done, and, acting the suggestion of Prof. Christopher Johnston, I had a rubber point put on my director, which facilitates the passage, as well as prevents laceration. A few days after my first examination I performed the operation. The patient being properly anaesthetized by inhalation of chloroform, I filled his urethra with

warm petroleum oil, and gently allowed the instrument to pass to the stricture, through which by careful manipulation and considerable patience, I pushed the point. Then rapidly turning the handle, the "morbid tissue" was torn up. Closing the blades by turning the handle the opposite way, after pushing the point further in the bladder to clear them of the shreds of mucous, I withdrew the instrument. The slight hemorrhage which followed soon stopped without my aid.

I directed the patient to remain in bed for one day only, and to take two

grain of quinine to prevent a chill; also some bicarbonate of potash to soothe the irritation caused by the laceration. Six days subsequently I passed without difficulty a rather bumpkin stone, which was as large as the natural calibre of his urethra. I instructed him to use a bougie of that size every day for some week, and morbid he passed it once a month, and has not the slightest symptom of any quite-urinary trouble.
He has recovered his former good health and peace of mind, which hope may be permanent.

No.6.

Operation for Convergent Squint by F. H. Shepherd.

A boy aged nine years was brought to me on December 17th, 1879, with a considerable internal squint of the left eye. I proposed to his father to divide the tendon of the "crooked eye" to which he consented. The pupil of the left eye almost wholly disappeared from view when the boy looked to his right. Having him chloroformed by a physician, I commenced the operation, after placing a wire speculum between the lids. First pinching up a vertical fold of the conjunctiva near the inner canthus, I made a horizontal opening through it and the subconjunctival fascia

down the sclerotic, with the straight scissors. Then introducing a strabismus hook under the tendon close to the insertion & drawing it to the opening, (the patient of course lying on the table) and divided it with the scissors, along with a breadth of fascia cutting it freely. More bleeding followed than I had expected, but it soon stopped. Stopping the anaesthetic and cleaning the blood from the wound I removed the speculum. I was somewhat surprised at the eye actually diverging, a few moments later, but having seen the same result in

Baltimore without bad effect. I was not alarmed, although the Chloroformist hoped I would assume all responsibility and the father looked unfriendly. I directed the nurse to keep the eye clean, and sent the boy home. Ten days subsequently I was again surprised to find upon examination, the slight stump of squint-internal which remained I ordered him proper glasses which I found to neutralize the hypermetropia and by which I hope success will be ultimately secured – at least, by March 1880, I expect to operate again.

# A Thesis
on the
Anatomy and Physiology
of the
Pneumogastric Nerve,
by
H. S. Frowlis of St. C.

Session 1879-80

Within the last century scientists have been engaged with increased energy and zeal, in the study of the anatomical formation and physiological functions of the human organism. Some have engaged in this work from a desire to acquire knowledge, and this is certainly laudable, but others from what I consider a far higher motive, namely, that having become acquainted with the anatomy and the physiological phenomena of our organism, they could not only better point out how health could be promoted, but also be enabled better to study pathological conditions and the most rational means of restoration to a healthy standard. In studying human physiology we

find the nervous system to be most intimately connected with the higher performance of the most vital phenomena of life. Among this nervous system, the pneumogastric or par vagum - one of the cranial nerves - is the one, by far the most remarkable, for its varied and extensive distribution and for the influence it exerts in regulating the normal action of some most important organs. It therefore behooves the physician carefully to study the origin and distribution of its filaments, and its relations and connections with other nerves in the body. Knowing these, it is then necessary that he should investigate the meaning and uses of these different filaments

going to different parts; in other words its physiological functions.

First, the Anatomy of the Pneumogastric. Its fibers have been traced to a series of filaments in the medulla behind the olivary body, and deeper to a nucleus in the floor of the fourth ventricle. It passes out the foramen lacerum posterius, presenting here a ganglionic enlargement, called the ganglion of the root. Just after its exit, there is another enlargement called the ganglion of the trunk. The first is nearly spherical and of a greyish colour, and has filaments connecting it with the facial, glosso-pharyngeal, spinal accessory, and sympathetic nerves. The ganglion of the trunk is about one half inch below

the former and is of a flattened cylindrical form and of a reddish colour. It has filaments connecting it with the hypo-glossal, spinal, and sympathetic nerves. The vagi pass vertically down the neck within the sheaths of the carotid vessels, lying between the carotid arteries and jugular veins. At the root of the neck, the two nerves take different courses on the right and left sides. On the right side the nerve enters the posterior mediastinal cavity between the sub-clavian artery and vein, and passes down on the side of the trachea to the back of the root of the lung, where it spreads out in the posterior pulmonary plexus. From this two chords descend upon the oesophagus, and by their union and

division on it, form with filaments from left side, the oesophageal plexus, In the lower part of the thorax, branches are again collected into a single chord which descends on the back of the oesophagus and is spread out on the posterior surface of the stomach.

On the left side the nerve enters posterior mediastinal cavity, passing in front of left subclavian artery and the arch of the aorta; it descends on the side of the trachea to the back of the root of the left lung, and, having spread out to form posterior pulmonary plexus, is collected again and descends, like its fellow, on the oesophagus to the stomach, and is distributed on the anterior surface of this organ.

Branches of the Pneumogastric.

From the ganglion of the root an auricular branch is given off - not of great importance.

The pharyngeal branch arises from the ganglion of the trunk, descends inwards to the side of the pharynx, and divides behind the middle constrictor muscle of the pharynx, & forms with branches from glosso-pharyngeal, superior laryngeal, and sympathetic nerves, the pharyngeal plexus. This plexus sends branches to the muscles and mucous membrane of the pharynx.

Superior laryngeal branch arises from the ganglion of the trunk, and is directed downwards and inwards to the larynx behind the internal carotid, and dividing

beneath this into the internal and external branches. The external branch gives filaments to the pharyngeal plexus and to the inferior constrictor muscle, and finally to the crico-thyroid muscle. The internal branch descends to the thyro-hyoid membrane, perforates this and is distributed to the mucous membrane, some filaments going to the epiglottis and the base of the tounge, also some to aryteno epiglottidean fold, and some are reflected downwards as low as the vocal chords.

The recurrent laryngeal branch arises on the right side in front of the subclavian artery, passes around behind this and ascends to the side of the trachea. On the left side, it arises in front of the arch of the aorta, winds around

behind this and ascends to the side of the trachea. Both nerves ascend between the trachea and the oesophagus, and give off filaments to the mucous membrane and muscular fibres of both tubes. They enter the larynx behind the articulation of the inferior cornu of the thyroid cartilage with the cricoid, and are distributed to all the muscles of the larynx except the crico-thyroid. Both nerves as they wind around their arteries, give off branches to the cardiac plexus.

Cardiac branches are given off both in the neck and thorax.

The cervical cardiac branches are two or three in number. The upper are small and join the cardiac branches of the sympathetic. The lower - a single branch-

arises in the lower part of the neck, and on the right side joins a cardiac nerve for the deep cardiac plexus; but the nerve on the left side ends in the superficial cardiac plexus.

The thoracic cardiac branches arise from the pneumogastric, on the right side by the side of the trachea, and on the left from the recurrent laryngeal nerve. They terminate in the deep cardiac plexus.

The pulmonary branches are numerous. The anterior two or three are small, and joining with branches from the sympathetic, constitute on the anterior surface of the roots of the lungs the anterior pulmonary plexus. The posterior branches are more numerous and,

are distributed on the posterior aspect of the roots of the lungs; forming there with branches from the second, third and fourth thoracic ganglia of the sympathetic, the posterior pulmonary plexus. Branches from these plexuses accompany the air tubes through the lungs.

The oesophageal branches are given off both above and below the pulmonary branches. The lower are more numerous and larger. The nerves on the right and left side form by their connections the oesophageal plexus.

The gastric branches are the termination of this nerve. On the right side the nerve is distributed to the posterior surface of the stomach, and joins the

coeliac and splenic plexuses. On the left side, the nerve is distributed on the anterior surface of the stomach, some filaments lying along the smaller curvature and some passing on to hepatic plexus.

Physiology of the Pneumogastric Nerve.

There seems to be a difference of opinion among experimenters, as to whether the pneumogastric at its origin contains any motor fibres or not; all agreeing that after its junction with the spinal accessory, it contains both motor and sensitive ones. The experiments of M. Kemp'en, however, seem to us to prove conclusively that it does contain, at its origin, motor fibres which are distributed to the muscles of the pharynx, larynx and oesophagus; although receiving additional ones from the

spinal accessory. The pneumogastric possesses the power of conveying sensations of pain, though not to any marked degree.

We will first note the functions of this nerve in its distribution upon the alimentary tract. Deglutition which commences in the fauces and pharynx is completed by the lower portion of the pharynx and oesophagus. These latter parts being supplied by the pneumogastric. If this nerve be divided in the middle of the neck deglutition is impeded; the food accumulating in the oesophagus, owing to the paralysis of its muscular walls. If the lower extremity of the cut nerve be irritated, contractions occur in the oesophageal tube.

It has been shown that galvanism of the superior laryngeal nerve produces movements of deglutition in the pharynx and larynx, and extending down the whole tract of the oesophagus. In swallowing, excitor impressions are sent up to medulla oblongata through the glosso-pharyngeal, but the motor influence is sent back by the pneumogastric, which causes rythmical contractions of the tube, as different portions of it are excited by the presence of food.

Influence on the stomach. Division of the pneumogastric in the neck causes complete paralysis of the muscular walls of the stomach. If the distal cut extremity be irritated distinct movements of the walls of the organ are produced. Longet has shown that if food be introduced,

after section of the nerve, a small amount of gastric juice is still secreted. But as the muscular contractions of the organ and the sensibility of its mucous membrane are destroyed, necessarily secretion and digestion are interfered with. The irritation to the mucous walls produced by the food is an incentive to gastric secretion, and the muscular movements of the organ are necessary to the proper intermixture of this.

Influence of the pneumogastric in the phenomenon of respiration.

The connection of the nerve with the movements of the glottis. Experiments have most conclusively shown an important difference in the physiological action of the superior and inferior laryngeal

branches of the pneumogastric. This difference we would suspect from their anatomical distribution. The superior laryngeal being distributed principally to mucous membrane, and is a sensitive nerve; while the inferior laryngeal is distributed principally to muscles, and is a motor nerve. By exposing the pharynx and oesophagus in an animal and opening these by a longitudinal incision, the respiratory movements of the glottis can be seen. The division of the superior laryngeal, which necessarily takes place in this operation, does not interfere with the experiment. If the inferior laryngeal be then divided on one side, there will be paralysis of the muscles of the glottis and vocal chord on that side. If both be cut across complete paralysis

of the muscles of the glottis results with intense dyspnoea. The arytenoid cartilages are carried inwards and act as valves in obstructing the entrance of the air, directly opposite to their natural normal movement. Vocalization is dependent upon this nerve. Vocal sounds are formed by the vibrating vocal chords and vary according to the formation of the larynx, the tension and approximation of the chords, and the force of the expiration. Paralysis of these nerves would necessarily cause loss of the power of vocalization.

Irritation of the inferior laryngeal causes muscular contractions in larynx, while an irritation of the superior laryngeal causes no muscular contrac-

tions except in crico-thyroid muscles.
The superior laryngeal has a most important influence in rendering the glottis extremely sensitive to the presence of foreign substances. Any irritation to the mucous membrane of the glottis, or vocal chords, causes a violent expulsive cough which tends to remove the offending body. This nerve has also some inhibitory action on respiration. If slightly stimulated respiration is made slower, while a strong stimulant will completely stop it. The inferior laryngeal has a slight action of the same kind. The functions of both of these nerves are very important to life. Paralysis of the superior laryngeal and consequent paralysis of sensation would allow the passage of food or fluid

substances into the larynx, down the trachea into the bronchial tubes & lungs, causing obstruction to the free passage of air into lungs, and death from apnoea. Paralysis of the inferior laryngeal, from paralysis of muscles already alluded to would produce death in the same way.

The pneumogastric exerts a most important influence on the reflex movements of the chest in respiration. If this nerve be cut on one side respiration grows more slow, if both cut still more slow, though it is easy and quiet. Inspiration is slow, while expiration is sudden. If the peripheral extremity be stimulated respiration is hurried, but if paralyzed

respiration is tetanized. Under ordinary circumstances it would seem that deficiency of oxygen acts on the terminal sensitive fibres of this nerve as an excitor to respiration. (There are other causes, however, which may act as excitors to respiration). The impression is sent up to the respiratory centre in medulla by the sentient fibres of this nerve; while the motor influence is sent down through the spinal cord, chiefly through the phrenics.

Influence of the pneumogastric upon the actions of the heart.

This nerve exercises an inhibitory influence upon the cardiac movements. If the nerve be divided in the neck on one side, heart action is increased. If the proximal extremi-

to be stimulated, there is no alteration in the cardiac movements, but if the distal extremity be stimulated the heart stops. This proves that its action upon the heart is direct and not reflex. If the stimulus to the nerve be kept up the heart will after a time resume its contractions. If the nerve on the other side be then stimulated the heart will again stop. If a direct irritant be applied to the heart, while it is stopped by a stimulant to the pneumogastric, it will contract and relax. Two kinds of ganglia have been discovered in the heart, excito-motor and inhibitory. The pneumogastric probably acts upon the inhibitory ganglion. Atropine seems to have the power of inhibiting

this inhibitory ganglion. Thus, when the pneumogastric is stimulated after atropine has been administered, the action of the heart will not be stopped. This inhibitory action of the pneumogastric doubtless goes on at all times, and may be affected by various circumstances. A blow upon the abdominal viscera of the frog will cause slowing or stoppage of heart action, through a reflex action sent up to medulla, acting upon the cardio-inhibitory centre there and through the pneumogastric. Emotions increase heart action, probably by causing paralysis of this centre in medulla. Some accelerator nerves of the heart have been discovered, in the lower animals but if the pneumogastric be excited they have no action, hence we infer that

their action must be very slight indeed.

The pneumogastric seems to exert some influence upon the liver by reflex action. If this nerve be cut in the neck, and the proximal extremity be stimulated, there is increased formation of sugar in the liver. It probably acts by exciting vaso-motor centre in the medulla, and in this way, causing increased blood supply to the liver with increased production of sugar.

Although, we have seen in studying the pneumogastric, that it does not exercise exclusive control over any of the functions or phenomena of our organism — with the exception of vocalization — yet it has

connection with the three great vital phenomena of digestion, respiration, and circulation. Hence implication of this nerve in disease is always a serious matter, and demands the vigilant attention of the physician. It is not within the scope of this essay to point out in what diseases involvement of the pneumogastric would be likely to occur, but we simply insist upon the importance of recognizing any deviation from its normal functions, and the necessity for prompt action on the part of the physician.

# Caries of the Spine
## A Thesis
By

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The disease, in its full development, consists of the destruction of the body or bodies of the vertebrae, along with the intervertebral substance; it most commonly occurs in children and is associated with the strumous diathesis.

It consists essentially of degeneration of the intervertebral fibro cartilages, strumous osteitis, — or more rarely of tubercular infiltration, followed by inflammation and death of the parts.

Now we consider the complicated structure of the spinal column, the various different tissues that enter into its composition, cancellated, bone, cartilaginous, & ligamentous,

its variety of movement, its exposed position, one would suppose that it would be the seat of disease more often than it really is.

Angular curvature of the spine — Pott's disease, — so called from the name of the surgeon who first described it, — may originate in disease of two distinct structures. 1st. Intervertebral fibro cartilage. 2nd. The bodies of the vertebræ. The seat of the disease exerting an important influence upon the course which it will run.

In that of the first kind, it consists of a strumous softening of the substance, absorption of the bone taking place and finally anchylosis. In this form abscess seldom occurs. When disease of the second kind occurs, it is generally bone

the spinous processes, arches, and intervertebral fibro cartilages in back, though it may involve the structures also. The disease attacks the cancellated portion of the bodies, in preference to the harder bone composing the discs of the bodies, the edges of vertebrae become thinned, eroded, and hollowed out anteriorly. In this way the bodies of from six to eight of the vertebrae may become eroded, producing at the same time death of the intervertebral substances, by cutting off its vascular supply. These changes most often occur in the dorsal region, but may occur in any part of the spine.

The mechanism of the curve which is usually the most marked feature, is easily understood by reference to its pathology.

The bodies thus thinned, at last give way under the weight of the upper part of the trunk, and the remains of the disintegrated bones become fused together, the trunk bending forwards, causing the spinous processes to project backwards. The degree of curving depends on the amount of destruction, and on the number of vertebræ involved.

At the same time, that the upper part of the trunk bends forwards, the lower part rarely maintains the normal position, but gives a compensatory bend, in this way preserving the centre of gravity of the body. The angle of curvature varies according to the number of vertebræ involved, the fewer there are diseased the more acute will be the angle of curvature.

It is seldom that the spinal cord becomes pressed upon, or injured, sometimes however, more particularly in adults, in which the course of the disease is rapid, spinal meningitis is set up, or the sheath of the cord may be affected by the binding and anchylosis not taking place, effusion on the cord may take place, or again some pressure may be made on the cord, producing paraplegia.

Symptoms.

Pott's disease commences in children in a very insidious manner, & is usually referred to some fall which the child has had, or to some blow received on the foot.

The first symptom which ob-

tracts attention, is the child's attitude, which is altered & characteristic. The body is held straight, & stiffly, and does not bend, but turns as a whole instead. The shoulders are raised, the chin thrown up, the toes turned in slightly, the child walking with great caution & stiffness. One of the earliest symptoms is an ill defined pain, either on the scalp, or running from there around to the stomach. This pain may be most readily explained by reference to pressure made upon the intercostal nerves, at their exit through the intervertebral foramina. After a time, it will be found that the child has difficulty in standing erect, and will seize hold of a rail, or chair, with which to steady himself, or by resting his hands

on his knees. He will have difficulty in raising himself, from the recumbent to the sitting position, or of turning over in bed, without the aid of his hands.

On examination of the spine we will find one of the following conditions. Either there will be a projecting spine which will be somewhat tender on pressure, or there will be felt a depression. The first of these, will be caused by the anterior parts of the bodies of the vertebra, giving way, allowing the body to bend forwards & causing the spinous process to project; the second occurring in the lumbar curve, the weight of the body falling backwards, and depressing the spinous process. There may be pains or tips of a neuralgic affection, associated with

muscular weakness & diseases of motor paraplegia.

Diagnosis.— The diagnosis is made at first sight, if the disease has progressed to angular curvature.— It is difficult however before curvature has taken place to diagnose it positively, the symptoms being somewhat obscure.

At this stage, it may be mistaken for intercostal neuralgia, rheumatism, gastritis, and it has been treated for dyspepsia.

It may be mistaken for diseases of the respiratory organs, when the disease is situated high up in the vertebral column.

There is often associated with it a peculiar sort of respiration, which is quite a prominent symptom,— it is short and grunting in

character. If here the child is placed, over your thighs, and the spine extended, by separating your knees, it will take a full deep inspiration — it is the "sigh of relief" as Dr. Lapse calls it, should you now bring your knees closer together, the same kind of respiration will be restored.

If spasm and pain have not been produced by this movement, they will be if the feet be urged with the two hands, and head with the other, — pressing them together, thus crowding the bones together & causing pain.

You may feel upon the spinous processes and give no pain, and especially would this case if the anterior parts, of the bodies of the vertebrae were diseased, should it be so you would give relief, rather than pain.

Do not bother sure of this barrier, as the disease frequently begins on the side of the vertebra instead of on the front, to ascertain this, prop upon each vertebra separately, & make it come in closer contact with its articulating surface. By taking out in that way, it may be found not only where the disease is, but how many of the vertebrae are diseased. Should abscess occur it would be liable to be confounded with suppuration from other causes. Prognosis — 1st deformity 2nd. Termination. As regards deformity if the disease has progressed, until angular curvature has taken place, very little can be done. The diseased vertebrae are matted together, by the sistered & disintegrated intervertebral substance and any albumen that strangulating the spinal

column, would open the canal, there being loss of substance in front, which would lead to spinal meningitis & death. In regard to life - the prognosis will depend on several conditions. If general vertebra be diseased, and the column do not bend or curve, unfavorable, false membranes will be built in vain, but if curving takes place in front, the cord, the patient will fare better, prospect of recovery.

Large abscesses may form, discharge, and by their copious discharges produce death.

Treatment. — The treatment for what has already been said, would naturally be supposed to have two ends in view, 1st Therapeutical & hygienical. 2nd, in preventing the deformity, or if it have taken place; supporting the head & upper part of the

breaks while the disease is running its course. In the front of these, Mr. Erichsen in his surgery says that, "this disease is always associated with the strumous diathesis." Whether this be the case or not, and some of that it is not, since the Cala has been attacked by the disease & some of the physicians, it is worth (waiving) from being new views of the complaint.

Active humane treatment is eminently proper, good hygienic regulations, pure fresh air, change of scenery, good nutritious food, cod liver oil iron & tonics. As to treatment of mechanical supports. - In passing over the organic forms of the affection, it will be remembered that one of the first symptoms, was a peculiar awkward gait in the gait, associated with weakness of the muscles of the back, so that a heavy

child attempted to turn around the whole body turned together.

To relieve the diseased bones, by lessening the muscles of the back, side, abdomen, thereby producing as much motion in the spine, and natural diminishing one cause of irritation.

With the apparatus used for this purpose two ends in view. 1st. To confine the diseased vertebra, as much as possible. 2nd. To fix a support in such a way around the body, that it will supplement the muscles and other structures, and prevent any bone in the part.

Some authorities recommend putting the child on a bed, in the prone position, and keeping it there for weeks, even months until

cured, but this is certainly very hard treatment to carry out practically, although it might do very well theoretically.

Dr. Taylor of New York, has invented an apparatus, which consists essentially of a band resting for support on the hips, which has attached two iron rods, running up aside of the spinal column, these are attached to a band running over the shoulder, & around under the arm pits. There is an additional support of an iron rod one on each side, extending from the hip band to the armpits, these have each a socket attached by which they may be made longer or shorter. But the most efficient support, is in the, buckskin, moulds of plaster of Paris, to cover the whole trunk, in first

used by Dr. Sayre, this can easily be applied & when once on forms a very firm & unyielding support. Application of the plaster. The child's clothing having been removed, a close fitting, high-built to fit, jacket must be carefully and not roughly. A small bag filled and placed under the shirt, upon the abdomen, this is to be removed when the jacket is complete. If this is neglected vomiting may be produced.

I place a very thin layer of cotton wadding around the body, principally at the places where the upper, & lower parts of the jacket will reach. I then place a muslin bandage over all of this, pulling it on as smoothly as possible.

The child should now be suspended;

to get the spine as straight as possible.
A iron bar 18 inches long, with a hook at each end, is suspended from the centre by a double block & tackle. From each end of the bar, ~~[illegible]~~ a strap, having a bar for the child's arms, & provided with a roll not cut, there are straps for securing the hand, but it is not often necessary to use them. The child is fixed in position by passing, with the arms through the straps, and so adjusting it that the lips of the bar should touch the floor, but ~~should~~ not sustain any weight. Commence with the plaster, by putting on a bandage, made of coarse unbleached calling, which has been dipped in chip plaster, & just before applying it to the child. After the first bandage is on, mix

a little plaster with water, making it thick. It must be done quickly, or it will set very soon.
By proceeding in this way, first with a bandage and then using wet plaster, until six bandages have been applied, then smoothing off the plaster, the jacket will be finished.
The child should now be placed on its back, with the shoulders and hips, when the hand may be taken from over the abdomen. The jacket may be strengthened by placing a piece of iron gauge in front, behind, keeping them from the middle line, if it should be necessary at any time to open the jacket. This may easily be done by sawing through the middle line. Should the plaster rub on a projecting spinous process, or should a sore point under it, the plaster may be cut

away from the fracture, any application made that will be required. As to the length of time, that the fracture will take to unite, that will depend on the presence of spine that takes place, I cannot tell this beforehand. I will write the best circumstances to my believers when.

Case 1. Mrs. H. aged 10 years while playing fell off a fence April 1875. did not hurt back at time. The next day complained of back, but apparently recovered. Following October was taken to University Hospital, complained of pain in stomach at night, spine then bowed, stomach projecting. On examination spinous process of 2nd lumbar vertebra depressed. Appliance jacket was put on & remained for some time, after which often was first

ow.

Case 2nd. L. aet 1. [illegible] 18 months ago fell, [illegible] 11 weeks after fall complained of headache, [illegible] gradually progressed to marked paralysis, about the 4th cerebral week. [illegible] paraplegic condition of cord.

A plaster jacket was applied, after which she was able to use her limbs, continued to improve.

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Group Dial Finder.

Pittsburgh Pa.

[illegible] disease affecting the parenchyma of the lungs. But what constituted the substance of the lungs? It cannot be considered bronchial mucous membrane as constituting the substance of the lungs.

[illegible] the membranous part of the bronchial tubes, and the parts connected by areolar tissue, form the other. [illegible] lining the bronchial tubes and air cells differed in structure, from that lining the larger tubes. The larger tubes are lined with epithelium [illegible] follicles; while the smaller tubes are lined with squamous

epithelium, and have no mucous glands. In bronchitis there is a tendency on the part of the disease to extend to the smaller tubes; and in pneumonia, the same law holds good. This proves not only a difference in structure, but also, in function [illegible] matter of exudation in the two diseases. Acute lobar pneumonia [illegible] the entire lobe, and may and often does invade the whole lung. [illegible] to confine myself to pneumonia in its acute form.

[illegible] and Contraction.—Inflam-
mation situated in lung does not
differ [illegible] inflammation situated
in other tissues. The lung [illegible] a
hyperemic or congested condition.
The [illegible] of the
[illegible] a
a serous exudation. The inflam-
tion [illegible]
the [illegible] hepatization condition.
The [illegible]
[illegible] part of the lung [illegible]
[illegible] will be found [illegible]
[illegible] or hepatized
condition, we find the most depen-
dent part of the lung affected [illegible]
the same [illegible]

congested condition of the lungs does not prevent the air from entering the air-cells, but at the same time, there is an effusion into the air-cells, which gives rise to the [illegible] of the [illegible] condition. [illegible] the air-cells are filled with a coagulable fluid and not a fluid coagulable. When this occurs, we have the condition known as red hepatization. This is preceding to an increased amount of blood in the lung substance, so the lung is in an engorged condition, it is full, heavy and soft in consistence, presenting the impression of pressure. (The time, rate, lep

ctization, is by some authors thought to be a vis nonea. The red appearance of the lung is owing to the corpuscular elements of the blood predominating. The lung, in this condition, is more than normal and, owing to the [illegible] of the [illegible] of the blood, sinks in water. A lobe, in this condition, may weigh two pounds more than in the normal and an entire lung sometimes weighs from three to four pounds more. The cut surface of a hepatized lung has a granular appearance and, on pressing the finger over it, and besides the secretion of

and granular vesicles. When the
less liquid matter escapes into
the cut surface, and there are no
distinctly microscopic [illegible]
[illegible]. The [illegible]
made up of molecular matter, which
is supposed to be amorphous fibrin
or [illegible] [illegible]:
[illegible] [illegible]
and blood disease. If the disease
[illegible] a favorable course, the exu-
dated matter is removed gradually
by absorption, [illegible]
[illegible] [illegible]
If so, what becomes of it when no
[illegible] takes place [illegible]
[illegible] [illegible]. The lung [illegible]

lung is not destroyed, upon the resolution is removed. The air cells resume their vesicles, and the lung resumes its normal function. In such cases, recovery is complete.

If the disease takes an unfavorable course, the exudation matter is not absorbed, and the affected portion of the lung is infiltrated with liquid fibrin and pus. This is called pneumonic infiltration. Collections of pus often settle in the lungs. This constitutes what is known as abscess. Gangrene of the affected part sometimes takes place; but these accidents are extremely rare. Considering us

merely accidental in connection with the disease. In this case, there may be effusion into the pleural sac; or it may be unyielding, with little or no effusion. The latter is most frequent; thus the two words, the terms pleuro-pneumonia is used: and as pleurisy, as a rule, always exists, the term is applicable in all cases. But the term is used to designate cases, in which there is considerable effusion into the pleural sac.

Bronchitis may exist in connection with pneumonia. In such cases, it is merely accidental: for there is no tendency on the part of

pneumonia, towards the bronchial tubes; so that, when bronchitis is said to, it may be considered as preceding the pneumonia, or implicating it as an accident. There may be bronchitis in the affected lobe or lobes, as a necessary consequence of the inflammation. Along with other things, there appears to be certain laws which govern pneumonia. There is always a whole lobe affected and the lower lobe seems to be the one mostly chosen. The right lung is oftener affected than left. There are exceptions to this rule. The upper lobe may sometimes be the choice—

Such cases of this kind are very rare. The disease may attack one side of the lobe, or it may invade one lobe, or three in succession. Or it may invade a whole lobe on each side. In this case the disease is called double. The portion of the lobe first attacked is variable. It may attack the upper or the lower portion of the lobe; and the part first affected may be either deep or superficial. The diffusion of inflammation is often very rapid, occupying only a few hours. In other cases it may require days. Physical examinations made at short intervals will enable us to ascertain the exact time occupied.

Some lobar pneumonia is divided into three stages. The first stage occupies a time in which the lung is in a state of active congestion. This is called the stage of congestion. The disease has reached the second stage, when the lung has become solidified by the inverted exudate. This is called the stage of solidification, or hepatization. In the third stage, the lung will be found in one of two conditions:- If the disease pursue a favorable course, absorption of the inverted exudate takes place, and consolidation is sometimes very rapid. This is called the stage of resolution

If the disease proceeds in unfavorable course, the third stage or the stage of putrefactive infiltration. If this occurs, the disease generally terminates in death. The duration of the different stages depends upon different cases. The first stage may occupy only a few hours, or it may last for several days. It generally occupies from 12 to 48 hours. The second stage, or stage of solidification, may be of short duration, or it may take one, two, or three days — sometimes occupying a much longer time. These cases are exceptions to the general rule.

The majority of cases occupy from two to four days. The stage of resolution is variable, as regards the time occupied in the removal of the solidified deposit. It rarely removed in less than four days, though there are cases on record, in which it has been removed in a much shorter time. The time for its removal may occupy eight or ten days. And sometimes may require a much longer time before the air cells are restored to their normal condition. If the disease passes into the purulent stage, recovery is very uncertain; and if it does take place, it may be marked

before the lung assumes its normal function.

Acute pneumonitis is generally ushered in by a chill, more or less pronounced, frequently accompanied with rigors. The temperature placed in the axilla shows a marked rise in temperature, although the patient may experience a sensation of coldness. The invasion is generally abrupt, often occurring at night. Accompanying or rapidly following the chill, we have pain, often severe, circumscribed in character, and felt about the nipple: or it may be diffused, radiating and lancinating. This indicates pleurisy

a complication. The pain is in proportion to the pleural surface affected. Cough is generally present, but not always. It causes suffering often, owing to the accompanying pleurisy. The cough is often accompanied by expectoration. The sputa at first is transparent and viscid and very often assumes a rusty color. This is called the rusty expectoration, and, when present, is considered pathognomonic of the disease. The rusty color is produced by the blood being intimately mixed with the tracheal mucus and passing through the bronchial tubes. The adhesiveness is such, that

when it is placed on a dish, it will remain upon the vessel is inverted. Rather expectorated sputa be of a semi-transparent or yellowish color, without the red tint. Sometimes it contains blood in abundance, and is then known as the prune-juice expectoration. In some cases of pneumonia, the expectoration may be entirely wanting. General prostration is usually experienced with the invasion of the disease, accompanied by fever. In connection with this, are there pain in the head, loss of appetite, and great thirst. The pulse may rise from 80 to 120 beats per minute. The thermometer

placed in the axilla, shows a rise in temperature, from 102° to 104° F. The temperature rising above this is very unfavorable. The respiration may be increased, owing to the existence of pleurisy, or to obstruction in the diseased lung, preventing the proper aeration of the blood. During the stage of solidification the sputa assume a rusty color. If pain has existed it generally disappears. The cough at first dry, now becomes less hard and painful, and expectoration is performed with much greater ease to the patient. The sputa thrown off loses its rusty color, becomes adhesive, and

gradual abundance. It may
now be called the expectoration of
resolution, or resolving pneumonia.
It is furnished by the bronchial
tubes in the affected part of the
lung. Should a new lobe be invaded
it may be known by a chill and
a sudden rise in temperature. The
respiration becomes more rapid
and extreme depressed may
pick. The febrile movement is
increased, but may be less intense
than before the invasion, owing to
the complete prostration. Cough and
expectoration may be present, or the
by absent, and the pulse may be
but little disturbed. These symptoms

will be quite to be classed, nevertheless during the stage of resolution, the symptoms denote improvement:— the pulse moderate diminishes: cough and expectoration become less: the appetite returns; the respiration resume their normal frequency; the strength increases, and recovery is complete. If the disease passes into the stage of suppuration, the pulse becomes very rapid and feeble: matter expectorated is abundant and purulent; the respirations become frequent and shallow the strength of the patient fails; and death takes place by the wasting of the vital powers, clogging of the

broncho tubes, by an accumulation of mucopurulent matter, may also contribute to a fatal result. The urine affords important indications as regards the progress of the disease during the stage of suppuration. The chlorides are diminished, or may be totally absent. They may be detected in the expectorated matter. A return of the chlorides to the normal standard denotes convalescence. The hold good in all inflammatory diseases. The nucleus are often deposited in abundance, and thus denotes destructive assimilation. Albumen may be found in small quantity in the urine, probably owing to the change

lack of the blood, caused by the obstruction opposed to its passage through the affected lung. If found in large quantity, we may suspect coexisting renal disease.
Albumen may be present. It may be of the low, mottering variety, which indicates the form known as typhoid pneumonia, it may be more active. The patient endeavoring to get out of bed, restlessness being necessary to keep him from doing so. These symptoms, if long continued, are very unfavorable. Slight jaundice may appear. The liver may be enlarged, owing to the damming

back of the blood in the right auricle of the heart. Thus causing an engorgement of the systemic veins. The existence of gangrene and abscess is followed by symptoms which denote their presence in the lung. The pus collected in the lung leads to a copious and sudden purulent expectoration. If the life of the patient be prolonged, pneumonia may take place. The existence of a cavity in the lung may be detected by physical signs. Gangrene may be suspected when there exists intense fetor, owing to the decomposition going on the lung. Gangrene is very rare and,

almost always proves fatal.
Pneumonia may be associated
with intermittent fever in malarious
districts, and is often very dangerous.
The malarial fever may obscure
the pulmonary disease; and, in turn,
the pneumonitis may present the
periodical paroxysms of intermi-
ttent fever. Pneumonia attack-
ing the interpeduncle may produce
delirium tremens. The complicat-
ion is always serious. A well mar-
ked fall in temperature often
precedes a fall of the pulse. The ex-
tremes of all the symptoms
in an uncomplicated case, if
it pursue a favorable course.

to very rapid. The pulse during convalescence may fall below the normal rate. On pneumo-ascites falls as low as 60 beats per minute.

Pathological Anatomy.

Lobar pneumonia: Begins in inflammation affecting a small lobe, but differing from the inflammation known as the bronchial lobes. As regards anatomical characters and position the exudation of pneumonia does not become organized as in pleurisy. Neither is it exfoliated and expectorated — in the respect differing from the exudation of lymphorrhea on the surface. The —

parted with the pulmonary and from circulating branches of the pulmonary artery. Causation. There does not appear to be any age exempt from acute pneumonitis. We find that attacking children under five years of age; but, between the age of five and ten years, the disease is not frequent. Between the ages of eighteen and thirty years appears to be most common. Exposure to atmospheric changes appears to be the cause of acute pneumonia in a great many cases. Persons long left to wet and cold exposure are liable to an attack. Intermittent fever has been thought by some to be

a predisposing cause. While most authors think that there is tendency on the part of intermittent fevers, to produce pneumonitis, but the proof may be said of pneumonitis in reference to intermittents. Each appears to be dependent on its own peculiar cause. Intemperance appears to be an exciting cause. Drunkenness is the cause seen in hospitals more frequently than drunkenness. The disease occurs oftener in males than in females. Sickly persons do not seem to be more liable to an attack than others. This is proved by the fact, that when it does happen in such cases it selects a fatal

fake rather than an effect, these are very rare in persons affected with asthma, emphysema, and chronic bronchitis — so that persons troubled with these complaints enjoy a great immunity. The same may be said of those affected with organic disease of the heart. Pneumonia often exists, as a complication, in typhus and typhoid fevers, and cerebral. Some suppose that diseases of the kidneys predispose to an attack but this is not generally believed. It occurs in certain seasons of the year more than in others. In the northern states it visits oftener in the spring months than at any other time.

while in the south it occurs often in the winter months. It appears to be more prevalent among women than others; and prevails to such an extent in some sections of the south as to be considered an endemic. Some years it appears to be a tendency to attack an upper lobe. At such seasons the mortality is very great. In the south, the disease seems to have a tendency to invade more than one lobe and then we find the mortality greater than in the north. The disease may be developed spontaneously, there being no obvious cause. Diagnosis. Acute pneumonia is generally ushered in by

in flesh which are very prominent.
If the patient be seized with a chill
followed by febrile movements,
with pain about the nipple, and a rusty-colored expectoration, it is but a
warning of the disease. But these
symptoms are not always present,
and then we must resort to a physical examination. The first stage
has signs peculiar to it. On placing
the ear over the affected lung, we
hear a crackling sound, similar to
rubbing hair between the fingers,
or throwing salt on a hot stone.
This is called the crepitant rale.
It is heard in inspiration. The second, or sub-crepitant rale, is heard in

respiration and expiration. There may also be slight dullness on percussion. As the wet stage of the disease in the first stage, it having passed to the second stage before a physician is called. In the second stage we find marked dullness on percussion. Bronchial respiration (bronchophony) is first heard over a portion of the lobe but soon rapidly diffused. The expectoration may vary in this stage, but it is usually the dry and moist. Bronchial rales may be heard in this stage also. The third stage, a stage of resolution, is marked by gradually softening of the solidified

nodule. Dry crackling rales arise to a variety of sounds, and this generally assumes the normal vesicular murmur. Dullness on percussion becomes less distinct, but slight dullness may continue for a considerable time after the exudation has been absorbed. The subcrepitant rale may be heard during resolution, and the crepitant rale often returns (crepitant rale redux). If the disease goes into the stage of suppuration, the dullness continues. There are moist bronchial rales owing to accumulation of pus in the bronchial tubes. The signs of solidification

can be remedied, if it is so, and the patient's life be saved till it is discharged into a bronchial tube. Pneumonic exhaustion may be resisted. Effusion taking place may be detected by the physical signs such as dullness on percussion, obliteration of the intercostal spaces, and the absence of vocal fremitus. Cavitations of the chest wall may take place after the removal of the liquid, owing to adhesions taking place. Prognosis. The prognosis in cases of empyema will depend on the amount of lung affected, complications and the constitution of the patient. On these points

Inflammation also differs in regard to recovery between these two different diseases. Considering as a single case of pneumonia, affecting a small lobe, there is no intensive tendency to recovery. This is the rule. When the whole lung is affected it is unfavorable. It is also unfavorable if the disease attacks an upper lobe. But these causes, if uncomplicated, are favorable as regard recovery, unless the patient be enfeebled by age, or other causes. The severity depends, not on the disease itself, as much as on existing affections, and bad hygienic surroundings. If allowed in the course of continued fever it may terminate fatally.

breast and exposed persons, when
there is complication of weather
beds in death. Occurring in persons
affected with organic disease of
the heart, it is very dangerous, and
the pulmonary symptoms more severe,
Pericarditis, intermittent fever
and delirium tremens, present very
unfavorable complications, and
render recovery very doubtful, though
some cases may recover, danger
is much greater if more than one
lobe be affected. There is dangerous
heart-clot in several cases when
an entire lobe is affected, owing
to the churning back of the venous
circulation, and the increased

of fibrin in the blood causes it to coagulate. This may be suspected if the disease has shown no immediate danger or a sudden change for the worse. This change is shown by the increased action of the circulation, the respiration is laborious, the countenance becomes anxious, expressive of impending danger, and patient speedily sinks into a moribund condition. In this case there is a new critical summit developed. In most fatal cases of pneumonia, death takes place between the 7th & 14th day. It may take place by asthenia in two or more lobes becomes rapidly involved. The case in which

Typhoid fever is a typhoid fever characterized by prostration and depression of vital energy; tendency to decomposition of the blood; constipation; abundant mucous secretions; enlargement of the spleen; blood stained or colored sputa; (some guide to detection); active delirium; foul, smelling delirium with great prostration; sub-sullen tendency. These symptoms point out the typhoid state, in which the vital powers give way, and the patient dies from exhaustion. When the disease is favorable, convalescence is rapid, and there is very little tendency to terminate in the chronic form — nor is there any tendency to a relapse.

# Treatment.

The different stages of inflammation require different treatment. In the first stage, the object is to allay inflammation, to subdue symptoms, and to prevent the constitution from up under the disease. In this stage the so-called antiphlogistic method — such as blood-letting, saline cathartics, and antimonial preparations — is indicated by experience to be effective and useful. But in many cases difficulty in determining when may require blood-letting. It is recommended when there is high fever, hot skin, and when the pulse is bounding and full; and when there is a plethoric condition of the system. Blood-letting in such cases is often

followed by the usual remedies for pleurisy. The respirations become slower and easier, much to the patient's comfort — the blood pressure is lessened, and there is less danger of its accumulation in the right cavities of the heart, and the consequent tendency to heart clot. Blood letting is contra-indicated, when the febrile movement is not marked; when the pulse is weak and frequent; and when the patient is otherwise feeble and anemic constitution. Diuretics may be given, and these followed by some form of sweating if the skin be hot, and the pulse firm and full, but this should not be given to the extent of producing distressing

nausea. Anodyne powders sometimes prove of benefit. Bicarbonate of potash and preparations of ammonia may be given for their sedative effects. If the symptoms are not urgent, and there is a tendency to asthenia, they should not be used. Opium, in some form, may be given in this stage. A Dover's powder is a very convenient form when given at bed time, it is very advantageously followed by good results. At all events to tranquillize the system, and the patient, we have very much relieved. Blistering is not admissible. Dry or wet cups may be used with advantage. Sinapisms and stimulating liniments may be used.

Some prescription to the effect are useful and may often be thought comforting to the patient. Some medical writers advise cold applications to the chest, and some even cold bath. In such cases we must consult the patient's feelings. The sponging with cooled medicine and the hygienic regulations, form the usual treatment in the first stage. In the second stage we must endeavor to hasten resolution, relieve symptoms, and support the system until resolution takes place. If there still be high febrile excitement, Veratrum Viride, in small doses, may be used for its sedative effects.

a soon subsequent suppuration, they are surpassed by other to promote dilation, if pain and discharge remain the application of the sponge, or douche, or stupes of warm water only, may contribute to the comfort of the patient. If the vital powers begin to wane supporting measures must be adopted, having the most efficient of these are alcoholic stimulants. Quinia is also of great value. Milk and animal broths are useful. Of course, they should be given in larger or smaller quantity in proportion as the tendency is to asthenia. Opium may be used beneficially in this stage, especially when the

is pain, vigilance, and restlessness depending on constitutional disturbances. It often brings about refreshing sleep. It is contra-indicated when there is an accumulation of mucous in the bronchial tubes, at least in full doses. When resolution has commenced, and is progressing, the treatment above mentioned should be continued, until convalescence is established. When this is the case, very little danger of relapse need be apprehended. The diet of the patient may be more solid and nutritious. Gentle exercise in the open air, either alone, or in social, innocent companionship, would be

to restoration. Of course the laws of hygiene, in all cases and in every stage, must be observed, along with judicious nursing as the most important measures in the treatment of the disease. Complications must be treated on the general principles applicable in such cases — in the best manner possible.

[illegible]

Thesis

Notwithstanding it is in accordance with the requisition of the Faculty that I shall deposit with them an essay on some subject pertaining to medical literature, I do it with unfeigned diffidence and embarrassment - knowing that it is to be perused and criticised by gentlemen of eminence in the profession, whose lives have been devoted to the study and observation of disease in its divers forms - thus acquiring such knowledge as has entitled them to rank and distinction; and whose teachings are accepted as indubitable

authority. I can but feel too sensibly my inability to set forth facts which have not been elicited by my worthy predecessors whose far-seeing eyes have accomplished so much towards the revelation of the Etiology, progress and results of disease; whose fields for observation have been vast, experience great, and energy untiring: whilst my acquirements are yet embryonic, comparatively, hence I do not expect to present disease in a new phase but to exhibit it more or less in detail as it has been observed. The disease to which I advert is one of great importance, and as it plays such sad havoc among infants it should occupy greatly the medical mind namely the infantile affection "Cholera Infantum"

# Cholera Infantum.

Of all the complaints incident to childhood, the above especially, merits such consideration as it contributes so largely to the mortality lists of infants. Indeed there are few diseases, of childhood, in the middle & southern portions of the United States, that tend more generally to a fatal issue than the subject under consideration — called also "Summer Complaint" of children. It is an endemic of our larger cities during the season of greatest heat; attacking children generally, between four and

twenty months of age or at the period of first dentition. So generally is it confined to this period of life that mothers consider their infants, in their second summer, as subject to unusual peril, and should they escape an attack at this period or pass safely through the disease, they are thought to have a fair chance of surviving the stage of infancy. It is not strictly confined to cities for occasionally typical cases are observed in towns. The term Cholera Infantum has been so extended as to embrace a large % of the diarrhoeal maladies of infants in the summer

months. It has been and is still applied to many mild, but protracted non-inflammatory or inflammatory forms of diarrhoea occurring in children during summer months — which indiscriminate application of the term I think is erroneous, as it should be employed to designate only that form of the diarrhoeal affections characterized by frequent watery stools, with vomiting, elevation of temperature, and rapid & great emaciation.

Symptoms — The disease is generally preceded by a premonitory stage — that of diarrhoea — sometimes

very profuse. And sometimes it begins very abruptly without premonition - the child previously in good health. The stools are thinner than natural and rather more frequent, but not such always, as to occasion much alarm. Suddenly the evacuations become much more frequent and watery, attracting the attention of the parents & giving rise to fear and anxiety by the rapid sinking and apparent danger to which the child is exposed. Discharges, designated, by some watery, and by others, serous characterize the disease.

Unless the premonitory stage of diarrhoea occurs there is considerable fecal matter in the evacuations at first; then they become so attenuated as to soak into the diaper like urine and frequently do not stain the cloth any more than this secretion. They have not the peculiar fecal odor, but a musty, offensive smell. Simultaneously with the watery discharge, or soon after, another exhibits itself, namely, irritability of stomach, which greatly increases the prostration and danger by the patient being unable to retain food

as it vomits every thing, and retching may occur without the the stimulus of food ts. There is anorexia with great thirst.
Cooled water is generally very acceptable and when the child is nursed, it seizes the breast eagerly in order to relieve its thirst. Tongue is moist at first and clean or covered with a light fur. The pulse is accelerated, while the respiration is normal or slightly increased in frequency; the surface is warm, but its temperature is speedily diminished. The temperature of the blood attains a greater height in this than al-

most any other infantile affection. In ordinary cases the rectum will give an indication of 104° to 105° and sometimes more. At first the infant is restless, which is due, not to pain, but to thirst or that unpleasant sensation which the sick experience when the vital powers are reduced. The urine is scanty as the disease is grave. After a few days the appearance of the child is so much changed that one unacquainted with the malady would wonder that such a change could be made in so short time. As the disease approaches a fatal termination (often

in a day or two) the child seems to notice nothing & remains quiet. The eyes are open and the pupils contracted; limbs and face are cool. As death draws nearer the breathing gets more rapid from the pulmonary congestion consequent on feeble action of heart. The surface becomes cold and clammy, and stupor results from which the child cannot be awakened. In favorable cases the disease is checked before the fatal symptoms occur.

The anatomical characters are principally intestinal. Rilliet &

Barthez, foreign writers state that the gastro-intestinal canal may present one of the fol. four conditions, viz- (a) that the stomach may be softened without any lesion of the digestive tube; (b) or the stomach is softened at the same time that the mucous membrane of the intestine, and especially its follicular apparatus, is diseased; (c) or the stomach is healthy whilst the follicular apparatus, or the mucous membrane is diseased; (d) or that the tube is not the seat of any lesions appreciable to our senses in the present state of our knowledge, or it presents lesions so insignificant that they are not sufficient to explain

the gravity of the symptoms"
American writers divide the disease into three stages; first, characterized by turgescence of intestinal follicles with more or less softening of mucous membrane; second, by the mucous membrane being vascular in patches and streaks & somewhat softened and thickened, while the solitary glands and the patches of Peyer are somewhat inflamed; third, the brain is involved, the cranial sinuses, veins & capillaries are congested, & there is transudation of serum upon surface and into ventricles of brain. Dr Watson says in his Work on Prac. of Medicine that "the liver is almost invariably

enlarged and more or less congested; while the Gall bladder is filled with dark green bile, or a pale and almost colourless fluid". Billroth observes have discovered various pathological condition of the internal organs in infants dying at different, and at the same stage of the disease. It appears to be dependent upon excessive heat and deficient hygiene, generally, as it is especially prevalent in heat of Summer among the poor who live in small, close, illventilated houses situated in narrow streets, courts, and alleys where there is generally much filth filling the atmosphere with effluvia, but other

agencies contribute to its production as it occurs in children of higher ranks showing that other circumstances aid in its generation, such as dentition, temperament, age, and diet. As an evidence that such are generally the causes, if the patient be placed under good hygienic treatment it will begin to improve at once; and the very rare occurrence of it in rural districts tends to confirm what has been said above as to its cause. The diagnosis requires no particular elucidation. The season at which it occurs, the age of the patient, the concomitance of vomiting and pain

ging, the nature of the discharges, and the course of the affection under it easy of recognition, except when Asiatic Cholera is prevalent from which it is exceeding difficult & often impossible to distinguish it. But the latter is so rare in this country that we seldom see it. As regards prognosis it is a very dangerous disease and every physician, however, well qualified, as he values his reputation, should be very careful in expressing his opinion as to the termination of the affection. If the urgent symptoms are relieved the disease may continue as an ordinary inflamation

of the intestines which is often fatal in hot weather. If the evacuations become thicker and less frequent, without cerebral symptoms & with warm limbs and good pulse we can generally give a favourable prognosis. It is of variable duration. In violent attacks the prostration is so sudden and rapid that the child often dies in a day or two, or it may soon begin to abate & get well or it may continue as an Entero-colitis for sometime & get well or terminate fatally.

Treatment— As the affection is one of very rapid progress it requires equally as prompt treatment. First of all proper hygiene is to be observed.

The patient should be placed under the most favorable circumstances - say remove it to the rural districts if possible. If the disease results from improper diet this should be corrected. If you have reason to suspect the presence of indigestible substances in the canal give an Aperient followed by an astringent. If Stomach is irritable the following will be useful. ℞ Hydrarg Chl. Mitis grs ¼ ½ Ipecac grij iv Aqua Calcis ℥ij Creosote gttsij M. Sig ℥i in ℥i of Milk or Lemonade; or ℞ Plumbi Acetat grv. Acidi Acet. dil gttsv Sac Albus ℥i Aq Dest ℥ij M. Sig ℥i every 2 hrs till vomiting ceases. In diarrhoea give Tonics and astringents. As soon as Stomach will bear it give light nourishing diet & Bismuth Subnitrat.

The following will be found useful

℞ Cerebrae Pulv. ʒij Pulv. Kino grs v Gum Acacias Sac. albus aa ʒi Opii grs i Myristicae grs i Ft. pt. chart. No xij Sig one at dose. May use Morphia hypodermically or ℞ Tr. Opii ded. gtt i Aq. dest. gtt xij M Sig use all hypodermically. But when there is a tendency to coma use opiate very cautiously. Iced brandy & iced water is very useful. Mustard plaster over abdomen is often of benefit. Lime water & milk, Carbolic acid & Aq. Calcis, Creosote & water. High temperature may be reduced by baths of 80° Fah. If tendency to Hydrocephalus or cerebral congestion, deplete carefully, especially if hot & feverish with tendency to coma. Stimulant should be given

Thesis
of
Jas. W. Greenleaf.
Feb. 1878.

# Typhoid Fever

1

Definition. — Typhoid fever is one of the continued exanthematous fevers characterized by so called spots, which usually appear upon the abdomen; it is tedious, is associated with marked lesions of the intestinal tract, and especially by involvement of the glands or patches of Peyer.

Causes. — The question of the contagiousness of typhoid fever is still a mooted one. There are possible authorities on each side. Hirtzen, Gilkey and others contend that it is often propagated by contagion, while a distinguished German

[illegible] recorded [illegible]
case [illegible] of [illegible] could [illegible]
to an [illegible] [illegible]
[illegible] however for a [illegible]
as if he [illegible] the [illegible]
[illegible] [illegible]

[illegible] is [illegible] to [illegible]
be productive of [illegible] fever. If [illegible]
[illegible] [illegible] [illegible]
cause it. [illegible] is a [illegible]
little city in the north western [illegible]
of St. [illegible], near the Blue Ridge
Mountains. The air is cool & bracing
with but little [illegible]. [illegible]
[illegible] [illegible] [illegible]
production of [illegible] is very improbable.
[illegible] The endemic fever of which

mountain city. as not [illegible]
[illegible] from [illegible] receiving
parts [illegible] microscopic germs rising in the
atmosphere from the lower part of
State which are then deposited in
the rain & snow on the mountains
there [illegible] a great deal of [illegible] of
forest & by a very considerable in
the [illegible] quantity produced
matured. This seems not improb-
able. The exercises were interrupted
the large number of cases occur-
ring between the 22 & middle of July.
Apparent cure is not so frequent
here as it appears to be in other cases
twice. Summer diet still appears
to predispose to the disease as far as

larger number of cases occurring in the summer and [fall] months. Typhoid fever attacks the two sexes about equally. All these, containing malaria, age & season may be called predisposing causes of Typhoid fever. In the humble opinion of the writer it is not any one of these [illegible] that produces it but rather a combination of all of them. The origin of this disease, as of all diseases, is of the greatest importance, [illegible] it is to be hoped that at some period not far distant science will discover the true cause so that it may be cured, and better still, prevented.

Clinical History & symptoms.

The infection is usually divided into three stages the premonitory, eruptive & stage of desq. The person feels very miserable. The first stage: & sometimes there are no appreciable phenomena in this stage. Cyanosis, epistaxis, slight diarrhoea, frontal headache, hyperaesthesia, chilly sensations & convulsions are the usual symptoms attendant upon the beginning of the attack. The eruption & the second stage is considered as pathognomonic of this fever. It begins about the second day or when the patient takes to his bed, appears principally on

The appetite is often [illegible]
but it passes away on [illegible] pressure. This condition is found in about three fourths of the cases, & usually continues throughout the case. In stages, sometimes changing from [illegible] & [illegible] to the back. In some of the stages [illegible] intolerable, in all cases therefore to consider the symptoms of [illegible] together.—

Nervous system. — Pain in the head, particularly in the frontal region, is often noticed with intolerance of light. This occurs most frequently in the big wing of the [illegible]. Relaxation of a more or less violent character is present in nearly every case. Generally the patient [illegible]

from sleep or [illegible] is a very important question. If, when spoken to, he will rouse [illegible] for a moment, then sink into a muttering delirium or talking he wants to see me, or his remarks may relate to his ordinary pursuits. This [illegible] delirium is [illegible] in diagnosis. Exceptionally the delirium is boisterous & active, [illegible] persistent is an unfavorable one. Picking at the bed clothes or an imaginary [illegible] in the air, is a [illegible] symptom. Twitchings of the muscles of the [illegible] & extremities, & [illegible] sults of the tendons of the wrist are [illegible] lines observed, may be referred to [illegible] nous phenomena. [illegible] flows in the

[illegible] are very [illegible]
teristic. Nausea [illegible] stiff are some-
times present while vomiting [illegible]
[illegible] are nearly always [illegible]
[illegible]. The patient may not [illegible]
for but little water drink it [illegible] held
to bid [illegible] th. Diarrhoea [illegible] the evacu-
ations is [illegible] of the dysenteric [illegible].
The stools [illegible] of a yellow color. It
may be hemorrhage from the [illegible]
Bowels [illegible] the teeth [illegible]
is likely to occur during the second
week. The edge of the tongue is usually
red, and the center brown. The
parotid glands may be involved.
The writer has seen very troublesome
diseases in them during typhoid

The presence of distension in the left iliac region, sometimes with vomiting, is one of the most important abdominal symptoms.

Pain may not be complained of or felt till pressure is made on the abdomen. In perforation of the intestine severe symptoms of peritonitis will very soon manifest themselves, such as great pain, marked increase in the frequency of the pulse, prostration, haggard countenance &c. There is a steady increase in the prostration and temperature for several days. The temperature is not continuous, it may be 101° in the morning, 102° or 103° then it falls and

falls being highest in the [illegible],
especially in this oscillation rather
towards convalescence. It has been
recently observed that the number of
pulse beats & the degree of temperature
do not bear a definite relation to each
other; for instance, the pulse may be
90 beats & the temperature 102° or more,
according to the old rule it would not
be more than 99° or 100°. The cir-
culation and temperature continue the
elevated throughout the course of the
disease & sometimes for two or three
weeks after the person is apparently
well.

Morbid Anatomy & Pathology.

Post mortem examination does not

[illegible] symptoms in the [illegible] nervous system characteristic of typhoid fever. There may be evidence of inflammation of brain but this is very likely owing to complications. The spleen is oftener involved than any other organ & is generally enlarged and softened. The liver, lungs and heart may be implicated & so it will be on account of the complications which sometimes occur. The most important changes and lesions take place in Peyer's [illegible] the solitary glands of the small intestine & sometimes in the mesenteric glands. The large intestines present nothing characteristic. These glands may go through the whole process.

of inflammation may become consolidated, or ulcerate. Occasionally the ulcers eat through the wall of the intestine and such fatal consequences result as peritonitis, abscesses, etc. The ulcerations fortunately generally terminate in cicatrization and heal. The larynx, pharynx and trachea may become the seat of inflammation. The kidneys are usually affected, being found pale and soft. These are the ordinary pathological signs in typhoid fever, the intestinal lesions being peculiar to this disease. Under the name Enteric fever has been applied to it on this account.

## Diagnosis.

This is generally easily made out by combining together the signs and symptoms that have been enumerated in the foregoing part of this treatise. It may however be mistaken for Typhus and Remittent fever, and it may not be amiss to mention some of the diagnostic differences.

1. Typhus is a very common and fatal disease in this country; whilst Typhoid fever is of unusual occurrence.

2. The peculiarity of the eruption and abdominal symptoms are sufficient to distinguish Typhoid from Typhus, the latter having a dark, mottled eruption with absence of

the intestinal symptoms, and the
cases having the characteristic marks
that I have already been given. 3.
Age and season have some value in
the differential diagnosis. Typhoid
never rarely attacks persons under
five or sixty years of age while
typhus does never old people.
There seems to be a physiological re-
son for this, as we know that the
organs that are involved in typhoid
fever already and almost universally
may after the age of forty five years.
Typhoid fever most frequently occurs
in the autumn months. Typhus
may occur at any period. 4.
Typhoid fever is rarely if ever

communicated by a [illegible] is highly contagious. If [illegible] [illegible] [illegible]

Let not be much difficulty in discriminating the two diseases. It is not so easy to distinguish Typhoid fever from some cases of remittent fever for the latter may have the ordinary symptoms and even the rose-colored eruption. When this occurs in a malarial district it is called typho malarial fever. Most cases can be distinguished by recollecting the ordinary difference between the two affections. Typhoid [illegible]

often has complications such as bronchitis, from which it must not be confounded with them.

Prognosis. The prognosis depends upon many circumstances, as the condition of the person at the time of the attack, the disease usually proving more fatal in a previously healthy vigorous subject than in one of a weak constitution; also upon the complications, most uncomplicated cases recovering. Statistics show that the mortality is about 20 per ct. Coma and violent delirium, comatose state, subsultus tendinum symptoms of

peritonitis indicates a rapid
& fatal mode of death is generally
by abscess or collapse.

Treatment. No specific or
abortive remedy has been discovered.
The best we can do when
is to treat the symptoms as they
arise. Nearly every case requires
stimulant, tonics & good nu-
tritious diet. Peruvian wine &
bark is a good stimulant tonic in
℥ii doses. Alcohol is often needed
though some say the patients
do as well without it. Opium
is indicated when the pulse is
weak and very frequent. Chicken
broths and above all milk are

be administered, or anything warm applied to the bowels, you be sure of it or not. but be careful not to over load the stomach. The physician should give directions about the diet of the person when he begins to sit up, which is numerous. Fresh air is a very important point in the treatment, or in a word good nursing and hygienic rules. If the temperature rises to 102° or 103° it demands immediate attention, and the best way to reduce it is as the most effectual bath or sponging the surface with cold water. The latter method is recommended.

[illegible] also [illegible] the
insulation [illegible] by Nature
[illegible] 3-6 c.c. repeated [illegible]
or more hours. In the hour
should be [illegible] or [illegible] not
suddenly stopped. This is
best accomplished by giving
tea, and Camphor. Cold water
[illegible] are used by some practitioners with [illegible] success.
[illegible] of [illegible] or [illegible]
irritation of the intestines [illegible]
5-20 gtt. or further time repeated
by [illegible] as indicated.
Morphia has been found to act
admirably in some cases where there
is a continued wakefulness,

and a low nutritive diet. Both depletion is contra indicated, Quinine has no special value in this affection unless there be distinct intermissions or evidence of malarial influence. — The bladder should always be carefully attended to and the catheter employed when necessary. — Occasionally the patient passes his urine and stools in bed either involuntarily or from indifference. Bed sores should be prevented against and properly treated when they occur. — After all, the best treatment in this malady is not medicine but good nursing.

It is proper for me to say that I am indebted to Prof. Hodgen's article in this case in the

J. J. McGee

Bellaire O.

"Heredity"

1880

Heredity is that law by which
all things are endowed with life
and to speak themselves,
Were I a visitor on this planet it
seems to me, this is the first
thing that would attract my atten-
-tion. In every class of the animal
and vegetable kingdoms, what a
similarity! How long has this
similarity existed? would be the
question that would naturally
suggest itself, The oldest history
we have tells in its first pages
of the creation of all things, and
that the living, moving creation
brought forth each after its kind,
Just ever since the world began.

as it exists not, so long as it has existed. And as long as it continues to hold its place in space so long will it continue to exist, and its influence be felt.

In the vegetable kingdom is the perfection of this law most clearly shown; modified only by climate. The seed produces a plant which retains all the beauty and perfection of its parents. From the tiniest growth to the giant trees of the forest we see with what mathematical precision the truth of the above is verified. And what true copies the vegetable world makes. The plant with root, stem, branches, and the order in which

they come off. leaves, with its many different shapes, and the flowers with all its complications of Calyx, corrola, stamens, pistil, pericarp and seed, are all the facsimile of the parent plant also, if the parent was an annual, a biennial, or perennial, so also will be the plant produced by its seed. The size depends much on climate, which modifies it to a great extent. thus, in the warmer climates we have the most luxuriant vegetation, tallest, and most gigantic trees. In the temperate climate we of the same species a more moderate growth, and in the cold climates the tendearest vegetation is wanting.

nothing such the hardiest of trees are found and of the smallest size. The oak is found in all climates, and in the warm we find it the king of the forest, huge in proportions, and majestic in beauty. And it is the more wonderful when we know that it came from the insignificant little acorn which covered its head in the earth, and was aroused from its sleep in due time by the influence of the quickening showers of spring, bursting its shell, sends its roots into the earth and toward the heavens it shoots its stalk, we look and marvel, saying: The infant of the giant of trees!

Its leaves are in pairs and are identicle to the leaves of its ancestors, the exact shape. Oblong, sinuate, pinnatifid, pubescent beneath, lobes obtuse, entire, narrowed at their base, the wood is so common that the school boy can easily distinguish it from any other variety

The bark presents peculiarities that cannot be mistaken, and is selected for tanning, being rich in tannic acid,

It is as obvious that nature ever imitates herself in the animal as well as in the vegetable kingdom, In our feathered creation we see to which a remarkable attest,

[illegible] from the [illegible]
minutest and microscopic insects,
to the largest of winged birds.
We see daily many striking
examples of each, color, shape,
instincts and peculiarities.
The duckling, which has only known
her own kind of its species, hatched
by a hen. All goes well with old
mother hen & family till she leads
them too near the brook, when to
her great astonishment & [illegible] pa
we have seen with what effort
she tries to persuade them to
abandon the water by running
along the edge and calling in
her plaintive accents, but to no avai

this conclusion was false. The instinctive liking for water is stronger than the persuasions of the old hen. We could soon class the duckling, from its having the "web feet," showing it to be a water fowl, also its flat bill tells us something, and its short legs.

The prosperous farmer recognizes and brings to account his knowledge of heredity. He modifies things at his pleasure, his grains, corn, wheat, oats, rye, barley, changing them all from a low grade to high, simply by sowing the best as "picked" seed, sowing "what we saw that also will we reap."

For inferior grades he breeds for his animals a thick and well proportioned stock. Thus, from a rough, rough, breed of cattle he manufactures, as it were, a breed of smooth and quiet, fleshy animals, for which he can find more ready sale. The way he does or brings about the change is as follows. He procures a male of the breed preferred, and brings together on him and his rough breed, the product is of a grade higher than his flock then with this product he still keeps his "blooded" stock and at last he reaches the point nearly at par. He manipulates his horses sheep and hogs, the same as the cattle.

a sporting man wants his horse to be fleet, and this is the way he gets them, he brings together a "fast" mare and a "fast" horse, and the colt will most surely be swift, also have shape, strength, and color, also all the peculiarities of the mother kicks, jumps, bites or is a runaway the colt is very likely to be of the same disposition, With dogs the sporting man takes for fleetness the hound, for "grit" the bull-dog, for knowingness the shepherd, with the three varieties he obtains almost any kind of dog he wants, thus he wants a knowing dog with grit he combines the grit of the "bull" with the knowingness of shepherd.

All along down the order of life we see this inevitable law manifest, from the lowest to the highest, even even the noblest of all creation must be submissive. Heredity extends over all the elements and functions of his organism to his external or internal structure, his special characteristics, his acquired modifications and his maladies.

1. His external structure

When looking at the infant the first thing that attracts our attention is its resemblance to one or both parent. Every one ready to say "It is the very image of its mother", or if you want an enemy say its rese-

[illegible]

Everything reports its limbs, trunk, head, nails, hair, and expression as characteristic features.

It would be considered an anomaly indeed, should ~~not~~ the hair of an infant born of "red-haired" parents be otherwise than red,

2' His internal structure,

Excesses and defects,

Disease appears often amid privation and poverty, I am acquainted with a family, the mother was a corpulent lady, and her five daughters were also, none of them weighing less than one hundred and seventy pounds, the heaviest weighing two hundred & thirty

The circulatory, digestive, muscular, and nervous systems. Also texture of fluids as well as solids, superabundance of blood in some families predisposes to apoplexy, hemorrhages and inflammations.

3. His special characteristics

Transmission of mental faculties.

Different nations as well as different families are noted for some special faculty which they transmit to their offspring. Some music, some the fine arts, some politics, some learning some inventions and machinery.

4. His required modifications.

Peculiarities of voice, stammering, speaking through the nose, loquacity.

insanity, hallucinations and idiocy,
deafness, of anomalies, fistulas
lameness, albinism, or fingers and toes
mute.

8/ His maladies,

Diseases are not less transmissible—
than anything else, or at least the
peculiar type of constitution in which
a certain form of disease is likely
to appear,

Insanity is the sins of the parents visited
upon his children

Syphilis— If there is a disease trans-
-mitted as a disease this is one,
The first thing we notice is, "the
baby has the snuffles." If in addition
to this the child is found to have

condylomata about the anus, and diagnosis is sure. The child is thin, poorly nourished, its muscles are flabby and its skin is brownish, cracked, thick, rough, and unhealthy looking. Dentition proceeds slowly and the fontanelles close late. The second incisor teeth present a characteristic appearance. The child looks prematurely aged: its hair may have fallen off, even the eyelashes and from the eye-brows. Also you see a peculiar eruption.

Tuberculosis.— The characteristics of this diathesis may be summed up as follows: thin skin, clear complexion, the surface veins distinct, eyes bright

pupils large, eyelashes long, cheekbones, face oval, ends of bones small, shafts the limbs straight, and have a highly developed nervous system.

Scrofulosis.— The child is of a phlegmatic temperament, its mind and body are backward; it is dull and heavy, its skin is thick and muddy looking; its complexion doughy, upper lip thick, nostrils wide, the alae of the nose thickened, cervical chain of glands enlarged; abdomen tumid and the ends and shafts of bones large.

Many diseases are considered as secondary, but let these three deathines suffice. They develop in many forms.

then shall we account for this great law that is so obvious the most casual observer must see and admit, be its cause not in the natural identity of the materials constituting the organism of both parent and child and in the union of the substance of reproduction?

This being the case could we not create able races of able men, by employing the means adopted by Frederic William I with his regiment of giants? He allowed them to marry only women that were not their inferiors in stature,

Could we by [illegible] [illegible] long diseases and had only to deal with with acute, I think the fight between physicians and death would be more even. And how many more would reach the allotted age, (3 score and 10) if the fight be by preventive medicine! and the time would come when the earth would be populated by a strong and healthy people, What a grand era it will be in the science of Medicine when the Doctor shall not only be called when people are sick, but be called on in council to advise and guard them against [illegible]

-breeding transmissible tendencies and to ward off the attack of a transmitted destroyer. Then can we say indeed, It is a blessing to be able to cure disease but to prevent it is thrice blessed.

End